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ABSTRACT

Proceedings are presented of hearings before the Senate Committee on Labor and Human Resources concerning the Women in Science and Technology Equal Opportunity Act. Testimony focused on the special health problems and needs of women and the need to provide equal opportunity for women in science careers. Among those testifying before the committee were Sidney Wolfe, Public Citizens Health Research Group; Barbara Seaman, co-founder of the National Women's Health Network; and Anne Briscoe, president, Association for Women in Science Educational Foundation. (LRA)

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WOMEN IN SCIENCE AND TECHNOLOGY EQUAL OPPORTUNITY ACT, 1979

HEARING

BEFORE THE

SUBCOMMITTEE ON HEALTH AND SCIENTIFIC RESEARCH

OF THE

COMMITTEE ON LABOR AND HUMAN RESOURCES
UNITED STATES SENATE

NINETY-SIXTH CONGRESS

FIRST SESSION

ON

S. 568

TO PROMOTE THE FULL USE OF HUMAN RESOURCES IN SCIENCE AND TECHNOLOGY THROUGH A COMPREHENSIVE PROGRAM TO MAXIMIZE THE POTENTIAL CONTRIBUTION AND ADVANCEMENT OF WOMEN IN SCIENTIFIC, PROFESSIONAL, AND TECHNICAL CAREERS

AUGUST 1, 1979

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

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WOMEN IN SCIENCE AND TECHNOLOGY EQUAL OPPORTUNITY ACT, 1979

WEDNESDAY, AUGUST 1, 1979

U.S. SENATE,
COMMITTEE ON LABOR AND HUMAN RESOURCES,
SUBCOMMITTEE ON HEALTH AND SCIENTIFIC RESEARCH,
Washington, D.C.

The subcommittee met, pursuant to call, at 9:35 a.m., in room 2228, Dirksen Senate Office Building, Washington, D.C., Senator Edward M. Kennedy (chairman of the subcommittee) presiding.

Present: Senators Kennedy and Metzenbaum.

OPENING STATEMENT OF SENATOR KENNEDY

Senator **KENNEDY**. We will come to order.

If you are a woman in America today, and on your own, it is harder for you to get health insurance coverage, harder to have your medical complaints taken seriously, and harder for you to become a doctor or a scientist than it is for your male counterpart. The plain, indefensible truth is that, in a nation founded on the principles of equality, women are second-class citizens in all aspects of the health care system.

Our current inadequate health insurance programs crystallize the problem. As we will hear today, those programs often tie coverage of married women to their relationship with their husbands.

Divorce or separation is thus not only a personal tragedy for many women; it often precipitates a health-related financial crisis. Divorced women, separated women, and widows suddenly find themselves, at times of greatest personal stress, without health insurance coverage. Often they can't afford individual policies. Often those policies exclude preexisting conditions, those conditions they had when covered under their husband's policy and for which they will need continuing medical attention. Often these women don't learn that their insurance coverage has been terminated until they get sick, and then find they can't care for themselves or for their children.

I believe every American has a right to receive quality health care. It should not be conditioned on employment status; it should not be conditioned on marital status. Health care should be conditioned only on need. What sense does it make to have a heart condition covered on Tuesday but not on Wednesday; to have children covered on Thursday but not on Friday? But that is the way it is in America today, and it must be changed, no matter what system of national health insurance is finally adopted.

Researchers at the University of California at San Diego have published an article showing that male physicians take medical illness more seriously in men than in women; 52 married couples with back pain, dizziness, headache, chest pain, and fatigue were studied. The medical evaluations were found to be far more extensive for the men than the women.

In addition, doctors prescribe far more tranquilizers for women than for men. For example, in 1978, in one limited survey by the National Drug and Therapeutics Index, 9.2 million valium prescriptions were written for women, and 5.4 million for men.

Finally, we will hear today about the difficulties women have in entering and advancing in careers in medicine and basic science. It is startling that the proportion of women earning doctoral degrees in science is the same in the 1970's as it was in the 1920's. Women scientists have an unemployment rate 3 to 5 times higher than their male counterparts. From 1973 to 1977 women represented just 6.2 percent of the doctoral work force in Government, and 1.9 percent of that work force in business and industry.

Today's hearing is the first in a series that will focus on the special health problems and needs of different segments of our population. We will see how these groups fare under present insurance programs and examine the impact national health insurance might have on them. But we will also look at their total health needs in order to target special efforts to solve the problems.

In other words, we are trying to evaluate under our current health care system how various groups are impacted by the types of coverage or the lack of coverage that exists in the United States. We are starting off with the impact on women, and later in the course of our hearings we will cover different groups, including children and others in our society.

We have tied to this hearing the concern that our committee has over the need to provide equal opportunity for women in science. Our committee has primary jurisdiction over the National Science Foundation, and a responsibility to the Congress and to the public to encourage the development of scientists, researchers, and physicians in a manner which assures equality of opportunity and a strong scientific work force.

[The text of S. 568 follows:]

96th CONGRESS
1st Session

S. 568

To promote the full use of human resources in science and technology through a comprehensive program to maximize the potential contribution and advancement of women in scientific, professional, and technical careers.

IN THE SENATE OF THE UNITED STATES

MARCH 7 (legislative day, FEBRUARY 22), 1979

Mr. KENNEDY introduced the following bill; which was read twice and referred to the Committee on Human Resources

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A BILL

To promote the full use of human resources in science and technology through a comprehensive program to maximize the potential contribution and advancement of women in scientific, professional, and technical careers.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Women in Science and Technology Equal Opportunity Act".

TITLE I—STATEMENT OF FINDINGS, PURPOSE, AND POLICY

STATEMENT OF FINDINGS

SEC. 101. The Congress finds that—

(1) it is in the national interest to promote the full use of human resources in science and technology and to insure the full development and use of the talents of men and women with scientific and technical skills;

(2) women have long been denied equal educational and employment opportunities in scientific and technical fields;

(3) the preeminent position of the Nation in science and technology depends upon the development of the full potential of the talents of men and women with scientific and technological skills, and the full employment of such men and women produces job opportunities in technical and support occupations and exerts a strong multiplier effect on the gross national product;

(4) the full use of the scientific and technical human resources of the Nation is required to meet the strong demand for such resources over the long term; and

(5) skills in science and mathematics are essential for entry and achievement in a wide range of professional and technical fields;

(6) literacy in science and mathematics contributes importantly to the ability of the individual to function in a wide range of activities;

(7) although men and women have equal potential for excellence and advancement in scientific and technical fields—

(A) the proportion of women earning doctoral degrees in science has not increased over the last fifty years;

(B) less than 10 per centum of scientists and engineers engaged in research are women;

(C) the unemployment rates of women scientists are three times higher than such rates for men in every field of science, and are five times higher among young doctorates;

(D) women scientists earn less than men in every field, at every degree level, at every level of experience and in every employment setting; and

(E) minority and handicapped women have yet to achieve measurable participation in science.

DECLARATION OF PURPOSE

SEC. 102. It is the purpose of this Act to encourage the full participation of women in scientific, professional, and technical fields through new and existing programs and procedures which—

(1) improve science education, with particular emphasis on mathematics;

(2) promote literacy in science and mathematics;

(3) prepare women for scientific, professional, and technical careers;

(4) increase opportunities for the employment and advancement of women in science and technology;

(5) encourage the participation of minority and handicapped women in scientific and technical careers; and

(6) educate and inform the public concerning the importance of the participation of women in science and technology.

STATEMENT OF POLICY

SEC. 103. The Congress declares it is the policy of the United States to encourage women to acquire basic skills in science and mathematics, to assure equal opportunity for women in education, training, and employment in scientific and technical fields, and thereby to promote scientific literacy and the full use of the human resources of the Nation in science and technology. Activities conducted to carry out the purposes and provisions of this Act shall—

(1) be carried out under the direction of the National Science Foundation;

(2) provide for the participation of groups with expertise in the advancement of women, especially groups involved in the advancement of women in science and technology;

(3) make maximum use of existing Federal programs and funding;

(4) provide for full coordination between all Federal agencies involved in carrying out the provisions of this Act;

(5) encourage the involvement in and contribution of resources for such activities by the private sector;

(6) encourage opportunities for accomplishing comprehensive and long-term institutional change relating to the participation of women in science;

(7) emphasize fields of study and employment in which the underrepresentation of women is most serious and in which existing public and private activities are insufficient;

(8) encourage maximum involvement of parents of girls and young women, especially in programs affecting students in elementary and secondary schools; and

(9) provide for and encourage cooperation between the industrial and academic sectors in accomplishing the purposes of this Act.

DEFINITIONS

SEC. 104. For the purposes of this Act—

(1) the term "Federal agency" means an agency as defined in section 551(1) of title 5, United States Code;

(2) the term "State" means each of the several States and the District of Columbia;

(3) the term "Foundation" means the National Science Foundation;

(4) the term "Director" means the Director of the National Science Foundation; and

(5) the term "Committee" means the President's Committee for Equal Opportunity in Science Awards established under section 311.

TITLE II—EDUCATION

ELEMENTARY AND SECONDARY EDUCATION PROGRAMS

SEC. 201. (a) The Foundation is authorized and directed to support activities designed to strengthen elementary and secondary school programs in science and mathematics in accordance with the provisions of this section. Such activities shall demonstrate potential to interest and involve female students and assist them in acquiring knowledge, skills, and information.

(b) Programs assisted under this section shall emphasize activities focused on female students and shall include—

(1) the development of methods, instructional materials, and technologies to improve the quality and relevance of education in science and mathematics and to increase student awareness of career opportunities requiring scientific and technical skills;

(2) the training and retraining (including inservice training) of teachers, counselors, administrators, and other appropriate educational personnel to improve the quality and relevance of education in science and mathematics and to increase student awareness of career opportunities requiring scientific and technical skills;

(3) the use of innovative methods, systems, materials, visiting women scientists and technicians, or other arrangements to encourage students to continue in and complete courses in science and mathematics and to consider careers in scientific and technical fields;

(4) student science training programs, research participation projects, and internships; and

(5) workshops for students and their parents and guardians to increase awareness and understanding of

the importance of basic skills in science and mathematics and of the extent to which scientific and technical skills are required for entry into careers.

(c) No grant may be made and no contract may be entered into under the provisions of this section unless an application is submitted to the Director at such time, in such manner, and containing or accompanied by such information as the Director may require.

HIGHER EDUCATION PROGRAMS

SEC. 202. (a) The Foundation is authorized and directed to support programs which demonstrate potential to (1) increase the participation of women in courses of study leading to degrees in scientific and technical fields, (2) encourage women to consider and prepare for careers in science and technology, (3) provide traineeship and fellowship opportunities for women in science and technology, and (4) provide continuing education opportunities in science and technology for women whose careers have been interrupted, in accordance with the provisions of this section.

(b) Programs assisted under this section shall include—

(1) the development of technologies, methods, and instructional materials at the undergraduate level to strengthen basic skills in science and mathematics and to increase student awareness of career opportunities requiring scientific and technical skills;

(2) the training and retraining (including inservice training) of faculty, counselors, administrators, and other appropriate personnel at the undergraduate level to improve the ability of such personnel to (A) strengthen the basic skills in science and mathematics of students whose primary field of study is not scientific or technical, (B) increase student awareness of career opportunities for women in science, particularly in fields in which women are most seriously underrepresented, and (C) increase student awareness of career opportunities for women requiring basic scientific and technical skills;

(3) the award of graduate and postgraduate fellowships, and career development grants directly to individuals and to individuals through institutions;

(4) research participation, traineeships, work study, and internship programs;

(5) projects to encourage individuals interested in scientific and technical fields to continue in and complete courses of study leading to degrees in such fields.

(c) No grant may be made and no contract may be entered into under the provisions of this section unless an application is submitted to the Director at such time, in such manner, and containing or accompanied by such information as the Director may require.

(d) Recipients of traineeships and fellowships under paragraphs (3) and (4) of subsection (b) of this section shall be paid such stipends (including such allowances for subsistence, health insurance, relocation expenses, and other expenses for such recipients and their dependents) as the Director may prescribe by regulation.

CONTINUING EDUCATION PROGRAM

SEC. 203. (a) The Foundation shall initiate a program of continuing education in science and engineering which provides opportunities for women who (1) are in the work force at the time of selection under the program authorized by this section, or (2) have had their careers interrupted, to pursue courses of study and activities which encourage the acquisition of new knowledge, techniques, and skills in scientific and technical fields.

(b) The program developed under this section shall include—

(1) the development of special curricula, educational techniques, and recruitment activities in cooperation with industry and academic institutions for continuing education in science and technology;

(2) the award of full-time and part-time fellowships to enable individuals eligible under subsection (a) to pursue courses of study which provide continuing education in science and technology; and

(3) other activities, including pilot programs and regional efforts, to further the purposes of this section.

(c) The Director is authorized to make grants to, and to enter into contracts with, institutions of higher education and other academic institutions, nonprofit institutes and organizations, and private business firms, for the purpose of developing courses and curricula designed for continuing education in science and technology under this section.

(d)(1) The Director shall allocate full-time and part-time fellowships under this section in such a manner, insofar as practicable, as will encourage the participation and advancement of women in careers in science and technology.

(2) The Director shall pay to individuals awarded fellowships under this section such stipends (including such allowances for subsistence, health insurance, relocation expenses, and other expenses for such individuals and their dependents) as the Director may prescribe.

(3) Fellowships shall be awarded under this section upon application made at such times and containing such information as the Director shall by regulation require.

EVALUATION

Sec. 204. The Director shall require that programs supported under this title include support for and expertise in the development and use of standardized evaluation tools and mechanisms in order to determine, as promptly as possible, the impact of participation in programs authorized under this title on (1) individual participants, (2) the activities of institutions and organizations receiving grants or contracts, and (3) the employment and advancement of women in scientific and technical positions at institutions and organizations which are participating in such programs.

TECHNICAL ASSISTANCE

SEC. 205. In carrying out the activities required by this title, the Director is authorized to make available technical assistance relating to the design and conduct of activities under this title.

TITLE III—PUBLIC UNDERSTANDING

PART A—INFORMATION PROGRAMS

CLEARINGHOUSE ON WOMEN IN SCIENCE

SEC. 301. (a) The Foundation is authorized and directed to establish and operate a Clearinghouse on Women in Science. The Foundation may operate the Clearinghouse directly, or may provide, by grant or contract, for the operation of the Clearinghouse in cooperation with other related publicly and privately supported activities. The Foundation shall take such action as may be necessary to assure that all activities associated with the development, implementation, and operation of the Clearinghouse are conducted with the full participation of groups active in the promotion of increased opportunities for women in science.

(b) The Clearinghouse shall closely coordinate its activities with existing publicly and privately supported efforts which further the purposes of this Act. The Clearinghouse shall assure that such coordination is designed to prevent duplication of effort in a manner consistent with the responsibility of the Clearinghouse to function as a primary and central source of information. The Clearinghouse shall collect, analyze, and disseminate to the public information concerning activities in the public and private sectors which encourage the full participation of women in science and technology. Such information shall include information concerning—

(1) publicly and privately supported programs designed to encourage the advancement of women in science;

(2) programs to assure equal opportunity for women in science and technology;

(3) programs to improve science education and promote literacy in science and mathematics;

(4) opportunities for minority and handicapped women in scientific and technical careers;

(5) data on the status and number of women in scientific and technological positions, including material gathered under titles II, III, and IV of this Act;

(6) research being conducted to increase the potential contribution of women in science and technol-

ogy and to facilitate the participation and advancement of women in scientific and technological careers, and the results of such research, including material gathered under sections 302, 404, 405, and 406;

(7) scientific research of particular interest to women and the research activities of women in science; and

(8) programs to educate and inform the public concerning the importance of the participation of women in science and technology.

(c) There is authorized to be appropriated the sum of $3,000,000 for fiscal year 1980 and for each of the nine succeeding fiscal years to carry out the functions of the Clearinghouse.

RESEARCH PROGRAM

SEC. 302. (a) The Director of the Foundation is authorized and directed to conduct, directly or by way of grant or contract, a comprehensive research program designed to increase understanding of (1) the potential contribution of women in science and technology and (2) the means to facilitate the participation and advancement of women in scientific and technical careers.

(b) The program shall include studies leading to understanding and amelioration of problems confronting young women in the study of science and mathematics, and the impact of science and mathematics skills on the entry and advancement of women in nonscientific fields.

DISSEMINATION

SEC. 303. Data collected and research conducted under sections 302, 404, 405, and 406 shall be made available to the public through appropriate dissemination mechanisms, including the Clearinghouse on Women in Science established under section 301.

MEDIA PROJECTS

SEC. 304. The Foundation is authorized and directed to support projects designed to improve the scope, relevance, and quality of information available to the public concerning the importance of the participation of women in careers in science and technology through the use of radio, television, journals, newspapers, magazines, and other media. In carrying out the provisions of this section, the Director shall develop criteria which assign highest priority to proposals which (1) demonstrate potential for increasing public awareness of the contribution of women in scientific and technical fields, (2) stress the importance of equal opportunity for women in careers in science and technology, (3) emphasize the importance of skills in mathematics and science in a wide range of activities and programs, or (4) include new techniques with potential to further the purposes of this section.

BOOKS AND INSTRUCTIONAL MATERIALS

SEC. 305. (a) The Foundation shall identify books and instructional materials which (1) encourage girls and young women to acquire basic skills in mathematics and science, (2) encourage girls and young women to pursue careers in scientific and technical fields, (3) stress the importance of equal opportunity for women in science and technology, and (4) emphasize the importance of skills in mathematics and science in a wide range of activities and programs. In identifying books and instructional materials under this section, the Foundation shall assign highest priority to books and materials which—

(1) portray women in scientific and technical careers;

(2) encourage girls and young women to consider careers in science and technology;

(3) emphasize the need for mathematical and technical skills in a wide range of activities and professions;

(4) present scientific and technical material in a manner responsive to the needs of girls and young women; and

(5) emphasize the equal ability and status of men and women in science and technology.

(b) Information concerning books and materials identified under subsection (a) shall be made available to the public through appropriate existing dissemination mechanisms, including the Clearinghouse on Women in Science established under section 301.

(c) The Foundation is authorized and directed to support the development of books and instructional materials which present science and mathematics in a manner consistent with the criteria established under subsection (a). Books and instructional materials developed under this subsection shall be considered for identification under subsection (a).

COMMUNITY OUTREACH

SEC. 306. (a) The Foundation is authorized and directed to support community outreach activities with the potential to attract substantial numbers of girls and young women and designed to—

(1) emphasize the importance of equal opportunity in scientific and technical fields;

(2) stimulate the interest of girls and young women in science and mathematics; and

(3) encourage girls and young women to continue in and complete courses of study in science and mathematics.

(b) In carrying out the provisions of this section, the Foundation shall make grants to nonprofit organizations which sponsor community activities, including afterschool, weekend, and summer programs, to enable such organizations to include programs related to mathematics and science in new or existing activities.

MUSEUM PROGRAMS

SEC. 307. The Foundation is authorized and directed to make grants and enter into contracts with museums and science centers for the support of projects which demonstrate potential to interest and involve women. Such projects shall be designed to encourage the study and development of basic skills in mathematics and science, to emphasize opportunities for careers in scientific and technical fields, and to stress the importance of equal opportunity for women in science and technology.

PART B—AWARDS

ESTABLISHMENT OF EQUAL OPPORTUNITY IN SCIENCE AWARDS COMMITTEE

SEC. 311. (a) There is established the President's Committee for Equal Opportunity in Science Awards, which shall be composed of thirteen members. The Committee shall make recommendations to the President and the Director concerning individuals to receive the awards authorized in sections 312 and 313 and to be visiting women scientists under the program authorized under section 314. In making such recommendations, the Committee shall consider recommendations from governmental and private organizations active in promoting equal opportunity for women in science.

(b) Each member of the Committee shall be appointed by the President and the membership shall represent a cross section of the physical, life, and social sciences. At least two members of the Committee shall be nonscientists. At least seven members of the Committee shall be women. In appointing members to the Committee, the President shall consider recommendations submitted by governmental and private organizations active in promoting equal opportunity for women in science.

(c) Members of the Committee shall be appointed to serve for a three-year term, except that the terms of office of members first appointed shall expire, as designated by the President at the time of appointment, five at the end of one year, four at the end of two years, and four at the end of three years. Any member appointed to fill a vacancy occurring prior to the expiration of the term for which the predecessor of the member was appointed shall be appointed for the remainder of such term. Members may be reappointed to serve one additional term of three years.

(d) Seven members of the Committee shall constitute a quorum, and any vacancy in the Committee shall not affect its power to function.

(e) The President shall designate one of the members of the Committee to serve as Chairperson.

(f) Each member of the Committee who is not otherwise employed by the United States Government shall receive compensation at a rate equal to the daily rate prescribed for GS–18 under the General Schedule under section 5332 of title 5, United States Code, including traveltime, for each day such member is engaged in the actual performance of duties as a member of the Committee. A member of the Committee who is an officer or employee of the United States Government shall serve without additional compensation. All members of the Committee shall be reimbursed for travel, subsistence, and other necessary expenses incurred by them in the performance of their duties.

(g) The Foundation is authorized to provide such additional assistance as may be necessary and appropriate to carry out the purposes of this section.

(h) The Committee, with the approval of the President, is authorized to establish such additional procedures and criteria as necessary to implement the provisions of this part.

DISTINGUISHED ACHIEVEMENT IN THE ADVANCEMENT OF WOMEN IN SCIENCE AWARD

SEC. 312. The President, upon the recommendations of the Committee, shall make not more than twenty cash awards, of $25,000 each, to be known as the Distinguished

Achievement in the Advancement of Women in Science Award. Awards under this section shall be made once each calendar year to the individuals, academic institutions, State or local public agencies, private nonprofit organizations, or business concerns which have made an outstanding contribution to the participation and advancement of women in science and technology. Each recipient of the award shall receive a suitable citation describing the achievements for which the award is presented.

MATHEMATICS AND SCIENCE INCENTIVE AWARD

SEC. 313. (a) The Director shall, upon the recommendations of the Committee, make not more than twenty cash awards of $10,000 each, to be known as the Mathematics and Science Incentive Award, to schools which include one or more of grades seven through twelve and which have demonstrated a commitment to encouraging the enrollment of girls and young women in mathematics and science courses, in accordance with the provisions of this section. Awards under this section shall be made to such schools which have demonstrated, over a period of at least three years, a substantial increase in the number of women enrolled in mathematics and science courses. Such schools which enroll substantially more than the national average of women in advanced mathematics and science courses shall also be eligible for awards. The Mathematics and Science Incentive Awards shall be presented once each year.

(b) Cash awarded under subsection (a) shall be used by the recipients to establish or further programs which encourage the participation of women in mathematical and scientific careers.

(c) Each recipient of the award shall also receive a suitable plaque to commemorate the achievements on which the award is based. The size and design of the plaques shall be determined by the Committee with the approval of the Director.

(d) The Director, in cooperation with the Committee, is authorized to establish such rules and regulations as are necessary to carry out his functions under this section.

VISITING WOMEN SCIENTISTS PROGRAM

SEC. 314. (a) There is established the visiting women scientists program. The purpose of the program is to select women scientists from a wide range of disciplines and geographic areas who shall visit secondary schools and institutions of higher education in all regions of the country in order to—

(1) encourage girls and women to acquire basic skills in mathematics and science;

(2) encourage girls and women to consider careers in science and engineering and to prepare themselves appropriately for such careers;

(3) provide information to students, parents, teachers, counselors, and administrators; and

(4) conduct lectures, seminars, informal discussions, and workshops concerning various aspects of scientific and technical careers for women.

(b) Each year, the Director, upon the recommendation of the Committee, shall name not fewer than thirty women from the Government, industrial, private nonprofit, and academic sectors to be visiting women scientists. Each woman selected shall demonstrate the potential to fulfill the purposes of the program as described in subsection (a). At least one-half of the visiting women scientists named in a particular calendar year shall be women who have degrees in science and engineering which were conferred during the five-year period immediately preceding the date of their selection.

(c) Each visiting woman scientist who is not otherwise employed by the United States Government shall receive compensation at a rate of $100 per day for each day she is engaged in the actual performance of her duties as a visiting woman scientist. A visiting woman scientist who is an officer or employee of the United States Government shall serve without additional compensation. All visiting women scientists shall be reimbursed for travel, subsistence, and other necessary expenses incurred by them in the performance of their duties.

TITLE IV—EQUAL EMPLOYMENT OPPORTUNITY

PART A—AGENCY RESPONSIBILITY AND ENFORCEMENT PROVISIONS

AGENCY RESPONSIBILITY

SEC. 401. (a) The head of each Federal agency, national laboratory, and federally funded research and development center which supports or conducts research and development in science and technology shall take appropriate action to—

(1) prevent discrimination against women in science and technology;

(2) increase opportunities for the employment, training, and advancement of women in science; and

(3) encourage the participation of minority and physically handicapped women in scientific and technical careers.

(b) The head of each such agency, laboratory, and center shall take such action as may be necessary to carry out the provisions of this section, including activities designed to increase the number of women—

(1) in permanent and temporary and in full-time or part-time scientific and technical positions at each appropriate GS level or other similar category;

(2) participating in internship and continuing education programs;

(3) realizing opportunities for promotion;

(4) serving on peer review and advisory panels; and

(5) serving as principal investigators for research projects, grants, and contracts.

REDUCTION OF THE INDIRECT COST RATE

SEC. 402. (a)(1) The head of each Federal agency, national laboratory, and federally funded research and development center which supports research and development in science and technology shall reduce the indirect cost rate of any organization or institution receiving Federal support for indirect costs in connection with the conduct of research and development in science and technology if, among the employees of the organization or institution holding doctorates in each of the fields of the mathematical, physical, medical, biological, engineering, and social sciences, the percentage of women employees of the organization or institution is more than 25 per centum below the percentage of women among all individuals in the United States holding doctorates in each of such fields. In accordance with the provisions of paragraph (2), the indirect cost rate of any such organization or institution shall be reduced by one percentage point for every percentage point that the percentage of such women employees of the organization or institution in each of such fields is more than 25 per centum below the percentage of women among all individuals in the United States holding doctorates in each of such fields.

(2) The indirect cost rate of any organization or institution under paragraph (1) may be reduced by up to 10 per centum.

(b) Any organization or institution whose indirect cost rate has been reduced pursuant to this section may apply for an adjustment of such indirect cost rate once in each six-month period after the date on which the Secretary initially reduced such rate.

(c) Upon good cause shown, the head of a Federal agency, national laboratory, or federally funded research and development center may waive the reduction of the indirect cost rate required under parapraph (1).

(d) For purposes of this section, the term "indirect cost rate" means the percentage of the amount of Federal support for research and development in science and technology which is received by an organization or institution from the Federal Government in addition to the amount of Federal support received to carry out research and development in science and technology in order to provide Federal support for the institutional costs of such research and development.

GRANTS FOR LEGAL ASSISTANCE

SEC. 403. (a) The Foundation is authorized and directed to make grants to persons to support legal actions which relate to discrimination in scientific and technological fields in accordance with the provisions of this section. A grant under this section may include support for reasonable attorneys' fees, fees for expert witnesses, and other costs expected to be incurred by a person bringing such an action. The Foundation may make a grant to a person under this section if—

(1) the legal action brought by the person can reasonably be expected to contribute to the alleviation of discrimination against women in scientific and technological fields;

(2) the economic interest of the person bringing the action in the outcome of the proceeding is small in comparison to the costs of bringing the action; or

(3) the person demonstrates that insufficient resources are available to bring the legal action in the absence of a grant under this section.

(b) Any review panel established to evaluate applications for grants under this section shall consist of attorneys with experience in cases relating to discrimination and representatives of groups active in the promotion of equal opportunity for women in science and technology.

(c)(1) Any person applying for a grant under this section shall sign an agreement which states that such person agrees to pay to the Foundation an amount equal to any fees or costs awarded by a court in connection with a legal action supported under this section. No agreement under this paragraph shall require any person to pay to the Foundation an amount in excess of the total amount of any grants received by the person under this section.

(2) Notwithstanding any other provision of law, the Foundation shall use any amounts received pursuant to paragraph (1) to make grants under this section.

(d) No grant may be made under this section unless an application is submitted to the Director at such time, in such manner, and containing or accompanied by such information as the Director may require.

(e) For purposes of this section, the term "person" has the same meaning as in section 551(2) of title 5, United States Code, and includes a class of individuals and any individual member of such class.

REPORTING REQUIRED

SEC. 404. (a) The head of each Federal agency which provides Federal financial assistance for research and development in science and technology which equals or exceeds $30,000,000 in any fiscal year and the head of each national laboratory and federally funded research and development center, shall report to the Congress annually, to the maximum extent possible through existing appropriate reports, concerning the employment status of women in scientific and technical positions, both at the agency, laboratory, or center, and in agency, laboratory, or center supported research and development projects. The reports required shall include a compilation, evaluation, and comparison, by sex, by discipline, and as a percent of the total of—

(1) the number of individuals in permanent and temporary and in full-time and part-time scientific and technical positions, by GS level or other similar category;

(2) the average salary of individuals employed in such scientific and technical positions, by GS level or other similar category;

(3) the number and type of promotional opportunities realized by individuals in such scientific and technological positions;

(4) the number of individuals serving on (A) peer review and (B) advisory panels dealing with scientific research and development activities; and

(5) the number of individuals serving as principal investigators in agency, laboratory, or center supported or conducted scientific research and development projects.

(b) The head of each Federal agency, laboratory, and center required to report under subsection (a) shall compile and evaluate the data collected pursuant to such subsection and shall transmit such data to the Director for use in the annual report required under section 404.

(c) The head of each Federal agency, laboratory, and center is authorized to establish such rules and regulations as are necessary to implement the provisions of this section.

DATA COLLECTION PROGRAM

SEC. 405. (a) The Director is authorized and directed to make an accurate assessment of the participation and status of women in all disciplines and job categories of scientific and technological fields in State and local governments, private enterprise, and academic institutions. The Director shall make and publicize such an assessment through the use of existing data collection, analysis, publication, and dissemination programs of the Foundation, other Federal agencies, and the private sector, and shall develop new programs, if necessary, in order to assure that a complete assessment of the participation of women in scientific and technological careers is made and publicized.

(b) The Director shall collect, compile, and analyze data concerning—

(1) the number of individuals in permanent and temporary and in full-time and part-time scientific and technological positions by appropriate job category;

(2) the average salary of individuals in such scientific and technological positions;

(3) the number and type of promotional opportunities realized by individuals in such scientific and technological positions;

(4) the number of individuals serving as principal investigators in federally conducted or federally supported research and development; and

(5) the unemployment rate of individuals seeking scientific and technological positions.

ANNUAL REPORT

SEC. 406. (a) Once each year, the Director shall make a report concerning the data received pursuant to section 404 and the data collected, compiled, and analyzed pursuant to section 405. The Director shall take such steps as may be necessary to assure that the data contained in the report is in a form which permits an accounting and comparison, by sex and by discipline, of the participation of women and men in scientific and technological positions in public agencies, business concerns, private nonprofit organizations, educational institutions, Federal agencies, Federal laboratories, federally funded research and development centers, and research and development projects supported by such Federal agencies, laboratories, or centers.

(b) The report of the Director required under this section shall be made available to the public through new and existing dissemination mechanisms, including the Clearinghouse on Women in Science established under section 301.

(c) The Director shall transmit the report required under this section to the Director of the Office of Science and Technology Policy, the Attorney General, the Chairman of the Equal Employment Opportunity Commission, the Director of the Office of Civil Rights of the Office of Education of the Department of Health, Education, and Welfare and the Director of the Office of Contract Compliance of the Department of Labor.

(d) The Director of the Office of Science and Technology Policy shall include the report received from the Director pursuant to subsection (c) in the annual report submitted to Congress under section 209 of the National Science and Technology Policy and Priorities Act of 1976.

PART B—OPPORTUNITY PROGRAMS

FEDERAL GOVERNMENT TRAINING FOR THE ENCOURAGEMENT OF WOMEN IN SCIENCE

SEC. 411. The Office of Personnel Management is authorized and directed to include in its training program for officials of appropriate Federal agencies, information and instructions relating to—

(1) the recruitment, retention, and promotion of qualified women scientists, engineers, and technicians;

(2) Federal programs designed to assist in assuring equal opportunity for women in science and technology;

(3) Federal laws requiring equal employment, education, and training opportunity for women; and

(4) enforcement and compliance mechanisms available to assure full participation of women in scientific and technological fields.

CIVIL SERVICE REGISTERS

SEC. 412. The Director of the Office of Personnel Management is authorized to take such action as may be necessary to increase the number of women listed in registers of persons qualified for and seeking scientific and technological positions. The Director of the Office of Personnel Management is directed to assure that such registers are circulated to each Federal agency, national laboratory, and federally funded research and development center which supports or carries out research and development activities.

DEMONSTRATION PROJECTS

SEC. 413. (a) The Foundation is authorized and directed to make grants to, or enter into contracts with, public agencies, business concerns, private institutions and organizations and individuals for activities to encourage employment and advancement of women in science and technology through—

(1) flexible work schedules and job-sharing arrangements;

(2) eligibility for fringe benefits and the establishment of tenure for part-time employees;

(3) the removal of antinepotism employment conditions; and

(4) other similar arrangements, including day care, which show promise of encouraging such employment and advancement.

(b) No grant may be made under this section unless an application is submitted to the Director at such time and in such manner and containing or accompanied by such information as the Director determines to be reasonable and appropriate.

VISITING PROFESSORSHIPS FOR WOMEN IN SCIENCE

SEC. 414. (a)(1) The Foundation is authorized and directed to make grants to academic institutions for the establishment of full-time or part-time visiting professorships for women in science.

(2) An institution applying for a grant under this section shall assure that—

(A) any visiting professorship for women in science established with support under this section is designed to include appropriate research and teaching opportunities, as well as opportunities for the visiting professor to serve as a source of advice and counsel for young women considering careers in science and technology;

(B) any individual holding a Visiting Professorship supported under this section shall come from the industrial, governmental, or academic sectors;

(C) each visiting professorship shall be in a department in which women are seriously underrepresented and in which the establishment of a visiting professorship is expected to increase the participation of women in science; and

(D) each visiting professorship shall be for a period of at least one year and not more than two years.

(b) No grant may be made under this section unless an application is submitted to the Director at such time and in such manner and containing or accompanied by such information as the Director determines to be reasonable and appropriate.

PART C—GENERAL PROVISIONS

DEFINITIONS

SEC. 421. (a) For purposes of this title—

(1) the term "Federal financial assistance" means any grant, loan, or contract other than a contract of insurance or guaranty;

(2) the term "national laboratory" means any Government directed research and development laboratory, as well as any research and development laboratory funded at least in part by the Federal Government, except as provided in paragraph (3) of this subsection; and

(3) the term "federally funded research and development center" means any organization which performs research and development exclusively or substantially financed by the Federal Government and which is administered by an industrial firm, university, college, or other nonprofit institution.

(b) The Director of the Office of Science and Technology Policy, in consultation with the Director, the Director of the Office of Personnel Management, and the Director of the Office of Management and Budget, shall establish the criteria for defining "scientific, technological, and technical positions" for the purposes of part A.

TITLE V—GENERAL PROVISIONS

AUTHORITY

SEC. 501. (a) Except as otherwise provided in this Act the Foundation shall, in carrying out its functions under this Act, have the same powers and authority the Foundation has under the National Science Foundation Act of 1950 to carry out its functions under that Act.

(b) Except as otherwise provided in this Act, the Director shall, in carrying out the functions of the Director under this Act, have the same powers and authority the Director has under the National Science Foundation Act of 1950 to carry out the functions of the Director under that Act.

SEVERABILITY

SEC. 502. If a provision of this Act is held invalid, the validity of the other provisions of the Act shall not be affected. If an application of a provision of this Act to a person or circumstance is held invalid, the validity of the application of the provisions to another person or circumstance shall not be affected.

AUTHORIZATION OF APPROPRIATIONS

SEC. 503. There are authorized to be appropriated for the fiscal year 1980 and for each of the succeeding nine fiscal years, such sums, but not to exceed $25,000,000 in any fiscal year, as may be necessary to carry out the provisions of this Act.

Senator Kennedy. As I mentioned in the latter part of my opening statement, there has been a very significant failure in our educational system in this respect. A variety of factors are involved including discrimination against women as they pursue various professional degrees. Even when they do receive these degrees and have a comparable level of education and skills, they experience a much higher unemployment rate than men, they earn significantly less than men, and are subject to a variety of other factors that work to their disadvantage.

We will start off on our hearing this morning by hearing from individual women about some real-life situations in health care that are unfortunately quite typical in communities around the country.

I greeted our witnesses here just before we began this morning, and I hope they will feel relaxed and feel at ease. I know it is never easy to talk about health care problems in one's family, but I want to give them the assurance that this information they share with us is of great importance to our committee and to our efforts in trying to change and improve the system.

The stories that we will hear this morning are stories that we could hear in any community in the the country. We have selected witnesses whose experience dramatize the problems which are all too typical. I am sure that our witnesses here this morning probably have friends, relatives, and associates, who have problems similar to their own.

I find that when I am in my own State of Massachusetts, a day doesn't go by when the types of problems we will hear about today are not brought to my attention. Sorrow and tragedy fill the problems these people must face. We appreciate the willingness of our panel to testify, and we look forward to hearing from them.

Senator Metzenbaum, who is an extremely active member of our committee, has been one of the members of the Senate who has been strongly committed to remedying the types of problems that we're going to hear about today. He has been a strong supporter of our efforts. He was also good enough to invite me to visit the Cleveland Free Clinic, a rather unique facility.

Howard, we look forward to hearing your comments at this time.

Senator **Metzenbaum**. Mr. Chairman, I want to say publicly that many people talk about other things which you might do, but the Senate would have a great gap in it if we didn't have your leadership. Without your leadership, I am sure we wouldn't be holding these hearings.

You have certainly made it possible, in setting up these hearings today, and so many others, to focus in on some of the issues of major concern to our Nation. I am particularly pleased to be here today for these important hearings on the issue of women and health.

We have already acknowledged the special health needs of minority groups in this country—the blacks, Hispanics and Native Americans. I think it is time we address the special health needs of a majority of people in this country: Women who make up 51 percent of our population.

The problems that women face in the area of health care are multifaceted and cannot be remedied by a single approach. In general, women face the same risks to their health as men do. However, women must also face the additional risks to their health associated with pregnancy, delivery, pregnancy prevention, and other related reproductive health risks. Often women must receive care from a medical profession which is composed predominantly of men, and is probably male oriented.

Women's groups have claimed that men make decisions about women's health care, about what drugs are safe or not safe for women to take, and about the development of new drugs and devices that are used predominantly by women.

Mr. Chairman, I believe that your bill, Women in Health and Science, which attempts to encourage women to enter the medical and research professions, is an important aspect to the improvement of health care for women. I welcome the opportunity to hear testimony from the distinguished witnesses who are here today on hormones, their effect on health, cancer epidemiology as it specifically relates to women, and the general health concerns of American women. I look forward to working with you and the subcommittee and the women who have indicated their interest and participation and involvement in this subject in the development of a comprehensive policy for women's health care in this country.

I am particularly pleased to see the amount of interest that this subject has engendered. It is one of the most important health issues for our Nation to address. I am grateful to you for your leadership.

Senator **Kennedy**. Thank you very much, Howard, for your kind words.

We will move forward now with our witnesses here this morning, and I will start with Ms. Diana McLaughlin. Ms. McLaughlin, you don't have prepared testimony, but I think you know the points that we're trying to address. I would like to ask you a series of questions to try and make sure that we cover the points. I want you to describe in your own words your experience with the health care system.

STATEMENTS OF MS. DIANA McLAUGHLIN, BALTIMORE, MD.; MRS. MARTHA RAY, WASHINGTON, D.C.; MRS. ETHEL GOLDBERG, PHILADELPHIA, PA.; AND MR. AND MRS. GEORGE BUCKWALTER, MARLBORO, MD., A PANEL

Senator **Kennedy**. As I understand it, you are divorced?

Ms. **McLaughlin**. Yes; I am.

Senator **Kennedy**. And when you were married you had pretty good health care coverage; did you not?

Ms. **McLaughlin**. Excellent coverage.

Senator **Kennedy**. What kind of policy was that?

Ms. **McLaughlin**. My husband belonged to Master Mates and Pilots, so it was union insurance.

Senator **Kennedy**. And do you have children?

Ms. **McLaughlin**. Yes; I have four grandchildren, Senator.

Senator **Kennedy**. As I understand it, you had a heart condition for some period of time; is that right?

Ms. **McLaughlin**. I have a heart defect that I've had all my life.

Senator Kennedy. You probably had treatment for that defect when you were a child and I expect the expenses were covered by your parents' health insurance; is that right?

Ms. McLaughlin. Right, and it was continued to be covered, of course, during my marriage.

Senator Kennedy. If you hadn't been married, and covered by your husbands union insurance, probably the chances are you wouldn't have been able to get health insurance.

Ms. McLaughlin. That's absolutely right. Or they would have rated me so highly I couldn't afford it.

Senator Kennedy. After your divorce did you have health insurance, or did it terminate with your divorce?

Ms. McLaughlin. It was terminated. Of course, as a displaced homemaker, that's the last thing you think about when you're getting divorced, whether you have health insurance. It doesn't dawn on you until much later when you need it, that you are absolutely uncovered. It's instant panic.

Not only do I have a heart condition, but I have a past history of cancer, which doubly kills you as far as being rated. So that no matter what type insurance I would have tried to get, I could have ill-afforded it, I think at almost any cost.

I want to tell you something that I think is pretty interesting. One of the health insurance companies—in fact, the largest health insurance company in the country today, I called to see about getting insurance, and I explained I had preexisting conditions, which, of course, I think is only fair to say. I said I realize this could change the policy, but I would like for them to send me the policy and I would like to talk about it anyway. She said, "Well, if I were you, Miss McLaughlin, I would lie about it."

Senator Kennedy. The insurance company suggested that?

Ms. McLaughlin. That's right.

And since I knew a little bit about insurance and all, I knew exactly what would happen if I did lie and got caught. They would cancel me and that would be the end of it. You know, that's a nice, neat mark if I tried to get insurance again.

But those were her words to me. She said, "I would lie."

Senator Kennedy. So you were——

Ms. McLaughlin. I was desperate. I needed insurance. I have been in the hospital twice for serious things since I got divorced. Neither time did I have any insurance. Maybe years ago I would have lied, but I know what would have happened to me.

I really think my experience was very interesting. I think people should know about it. If I was being told to lie, then other people as well were being told to lie about preexisting conditions.

Senator Kennedy. What happened to you after you got divorced? Did you need hospitalization?

Ms. McLaughlin. When I got divorced I was living in Florida. I fell off a bike and fractured my hip. I went to the same hospital that I had gone to for years and where my children had gone, when, of course, I had been very adequately covered. I had an excellent surgeon, excellent care.

Then the time came for them to say something about paying the bill—they had never asked me when I walked in, so help me. They never said anything to me. They had just assumed, because I had been there before, I was covered. When they asked me I told them I had no coverage.

Well, they were a little taken aback. I went downstairs to the office. I couldn't walk too well—in fact, I couldn't walk at all. One of the office personnel came back upstairs and he said to me, "Are you sure you're divorced?" [Laughter.] I said, "Yes; I am." He said, "But you had such great insurance when you were married." I said, "That has nothing to do with me today."

Needless to say—well, I had a very good surgeon who knows me quite well, and he told me, "Pay it when you can, Diana. Don't worry about it." But the hospital bill I still owe, and I owe thousands in Florida on that one thing, for all kinds of X-rays and everything, to learn to walk again. Then after I got up here——

Senator **Kennedy**. Did they try to make your son sign for the bill?

Ms. **McLaughlin**. That was very interesting. I have an 18-year-old son who was with me at the time. The office called him in and said, "We want you to sign a paper for your mother, to be responsible for your mother." He came up to see me and said, "Ma, they want me to sign the papers; is that OK"?

Well, if you could have a fit lying flat on your back, I would have had a fit. I said, "For God's sake don't sign a thing. You are not responsible for me. Eventually I'll take care of my own bills. But at this point you're not responsible and I will not have you be responsible for me."

Well, they were a little unhappy about that. I also have three other grown children that I'm sure, had they been there, they would have done the same thing to them.

When I got up to Baltimore——

Senator **Kennedy**. Let me just interrupt, if I could, for a moment.

What is the kind of emotional trauma that you live with when you know that you don't have health insurance coverage? Does this give you a sense of stress or anxiety, do you fear illness or sickness or hospitalization?

I think one of the important benefits of health insurance coverage is that it relieves people from that type of anxiety. I was wondering, given your own experiences, whether you were anxious during the period of time when you knew you weren't covered.

I would like the other witnesses to think a little bit about that, too. I would be interested in their views.

Ms. **McLaughlin**. I think you have to understand that after being married for 35 years and being in this nice, comfortable atmosphere, I had so many problems that I don't know which was the most important. I will have to say that as a displaced homemaker and working as a displaced homemaker, that there are thousands more women just like me who had this same thing, who did not think about that because that was not their initial problem.

My initial problem was I had to learn to walk again. I also had to eat. I had to survive. I walked out of a divorce with not one penny. My husband gave me nothing. The judge said to me, "You're too old for rehabilitative alimony." So I had to first survive——

Senator **Kennedy**. Was this a male judge? [Laughter.]

Ms. McLaughlin. This was a male judge, and Senator, I'll tell you, he was from Texas. [Laughter.]

But that's what I was told. I had to eat. My husband was in the merchant marine. I had absolutely no redress to getting a dime from him. They are sitting there covered under nice acts of 1700 which allows them to do, if you'll pardon me, as they damned well please. So I got nothing, and I also got nothing half the time I was separated because he was at sea, and unless I could get the U.S. Marshal to nail him on a ship in a U.S. port, I was out of luck. That's the strongest I have ever said anything about my marriage, but you should know that.

Really, thinking about my health insurance was the last thing on my mind. I wanted to eat.

Now, I have lived with a heart condition and I also have lived with having cancer for many a year. And it's——

Senator Kennedy. Do you have coverage now?

Ms. McLaughlin. Today I have coverage through the center. But up until 5 months ago I had nothing.

Senator Kennedy. So what period of time was it that you were without coverage?

Ms. McLaughlin. This was a period from when I was 56 until I was 59½. So that's a long time to wonder every day if something could happen to you.

Senator Kennedy. So you had those conditions—the heart condition since you were a child, covered by your parents, and that condition well covered by your husband's insurance, and also the history of cancer. You were covered one day and then, because of your divorce, even though you're the same human being, even though you have the same friends in the hospital, knew the doctors and the personnel in the hospital, you went in there and suddenly there's an entirely different relationship. Suddenly, you're not covered.

Ms. McLaughlin. That's right.

Senator Kennedy. What sort of sense does that make, to have the question about coverage of health care depend upon the status of your marriage? Does that seem to make any sense to you?

Ms. McLaughlin. It makes no sense whatsoever, absolutely.

You know, I think probably, after eating, that is one of the most stressful things you can have, the fact that every day something could happen to you and you are going to have to go to that hospital and you are not going to be able to pay that bill.

Furthermore, because of coming back to a State where I do not know anybody, I walked into a hospital—I mean I was taken into a hospital—last year and I have to say right off the bat "I don't have any money" and they can refuse me and I cannot get in.

What happens to a person like that? I happened to have a private doctor at that point and that's the only way I got into a Baltimore hospital. No way are they going to touch me. I'm in there for heart problems——

Senator Kennedy. Imagine what would happen to people who didn't have health insurance coverage or a particular physician. They would have difficulty in getting into the hospital.

Ms. **McLaughlin**. They can't get in. I mean, what happens to you when the ambulance picks you up on the street and you get to the hospital? The first thing they say to you is——

Senator **Kennedy**. But your husband was covered all during this time?

Ms. **McLaughlin**. Right.

Senator **Kennedy**. After the divorce, there wasn't any termination of his coverage.

Ms. **McLaughlin**. Absolutely not. The union coverage is for the union member.

Senator **Kennedy**. Let's move to Mrs. Ray. As I understand, you and your husband were separated in 1976 after 10 years of marriage; is that correct?

Mrs. **Ray**. That is correct.

Senator **Kennedy**. And do you have children?

Mrs. **Ray**. Yes.

Senator **Kennedy**. And what does your husband do?

Mrs. **Ray**. My husband is a scientist at NIH, a scientist administrator.

Senator **Kennedy**. What happened to your health insurance coverage after you were separated?

Mrs. **Ray**. He dropped the family coverage and went to an individual coverage.

Senator **Kennedy**. And did you know that your coverage had been dropped?

Mrs. **Ray**. No, I did not, not until quite a number of months later.

Senator **Kennedy**. And how did you find that out?

Mrs. **Ray**. I found it out by having a charge for our daughter's care disallowed.

Senator **Kennedy**. Your daughter got sick and needed some health care——

Mrs. **Ray**. That's correct.

Senator **Kennedy**. And you assumed that your coverage had continued, and then you found out that it had been dropped; is that so?

Mrs. **Ray**. That's right.

Senator **Kennedy**. That was the first time you found out you weren't covered?

Mrs. **Ray**. That's right. I had called a number of times to make sure I was still covered, and each time I was told, "Yes, you're still covered". But I wasn't covered.

Senator **Kennedy**. You could have converted your policy probably——

Mrs. **Ray**. That's true.

Senator **Kennedy** [continuing]. To another policy.

Mrs. **Ray**. That's right.

Senator **Kennedy**. But since you assumed you were covered, you didn't do that?

Mrs. **Ray**. That's right. You have 30 days to convert, and naturally, by the time I knew that I was not covered, it was too late.

Senator **Kennedy**. That was in 1976 when you were separated. Now in 1977 you were in an automobile accident?

Mrs. **Ray**. Yes; in May 1977 I was in an automobile accident.

Senator **Kennedy**. And did you have health insurance at that time?

Mrs. **Ray**. No; I had no health insurance at that time.

Senator **Kennedy**. So how did you manage the bill?

Mrs. **Ray**. Well, I still owe them. An orthopedist has treated me and so far I have not paid him. And since then I have had to have surgery and I owe the newest surgeon as well, as well as the hospital. I could go on.

Senator **Kennedy**. In 1978 did you get a Blue Cross policy?

Mrs. **Ray**. Yes, I did. I would have been frightened to go on any further, even though I really and truly can't afford to have it. Yes, I did.

Senator **Kennedy**. What are the premiums on that?

Mrs. **Ray**. They're $111.50. That started out much higher, and for some reason that I don't understand——

Senator **Kennedy**. That's a month, correct?

Mrs. **Ray**. That's a month, per month.

Senator **Kennedy**. And do they exclude preexisting conditions?

Mrs. **Ray**. That is correct. They excluded our daughter's osteochondritis dissecans, which is a bone disorder, which is a serious exclusion. And they also excluded——

Senator **Kennedy**. Let me just ask you on that point: Will there be additional medical expenses that will be associated with your child's illness?

Mrs. **Ray**. If she should require any care that is associated with this condition, I will not have money to pay for it, because it is excluded under the health insurance.

I could add to that if you care to listen.

Senator **Kennedy**. She was covered under your husband's policy for this condition?

Mrs. **Ray**. That's correct.

Senator **Kennedy**. But not under this policy?

Mrs. **Ray**. That's right.

Senator **Kennedy**. Still, the condition hasn't changed?

Mrs. **Ray**. No; the condition is the same, and she has increased problems.

Senator **Kennedy**. And you have had some health conditions which have been excluded as well?

Mrs. **Ray**. Yes, I have. But frankly, I think they're ridiculous. I am excluded for migraine headaches——

Senator **Kennedy**. Migraine headaches?

Mrs. **Ray**. Yes, and conditions that stem therefrom. I can't imagine what conditions might stem from migraine headaches, but I'm excluded in any case. And for a low thyroid, anything connected with that.

Senator **Kennedy**. What's your own sense about that? I mean, does it make any sense at all to you, given the fact that you are covered, your husband was a scientist with good coverage; you get separated and then find out because more than 30 days has gone by after he switched to single coverage you're really left out in the cold and your daughter is left out in the cold, with preexisting conditions which are excluded from coverage under Blue Cross, preexisting conditions such as your migraine headaches.

You're the same human being; your daughter is the same person that was covered under the other health insurance policy. Does any of this make any sense to you?

Mrs. **Ray**. No, it does not.

Senator **Kennedy**. And you're still paying back some of the previous bills, are you not?

Mrs. **Ray**. I hope some day to pay them back, but it takes all we have to just barely exist. I don't have money for medical expenses. My friends help me a good deal.

Senator **Metzenbaum**. You mentioned that you had 30 days in which to reenroll in Blue Cross. Were you given that 30-day notice?

Mrs. **Ray**. No. Blue Cross told me they are not required by law to notify the dependents. I said to them, "Well, you sell insurance, and it seems to me that you're letting a good market go to waste because a lot of these people would be delighted to have insurance. So it seems to me the only thing that you care about is having us lose our coverage and then have to come in with lesser coverage."

Senator **Metzenbaum**. Who got the 30-day notice, Mrs. Ray?

Mrs. **Ray**. I don't imagine any 30-day notice was given. My husband just simply changed the coverage without telling me and that was it.

Senator **Metzenbaum**. And when you spoke with Blue Cross, did they tell you that there was a 30-day notice or a 30-day grace period?

Mrs. **Ray**. A 30-day grace period in which I had to get a different kind of coverage for myself and my daughter. And if I did not, tough.

Senator **Metzenbaum**. I don't know how anybody would have known about such a grace period during that trying period immediately after a divorce.

Mrs. **Ray**. No; I don't either.

Senator **Metzenbaum**. Would Blue Cross then insure you, without any exclusions, in that 30-day grace period?

Mrs. **Ray**. My understanding was that they would have taken me during that period of time, with basically the same type of coverage. But it was a Government policy so perhaps there would have been some differences. But in any case, I don't think I would have had exclusions.

Senator **Metzenbaum**. That's very inequitable.

Thank you, Mr. Chairman.

Senator **Kennedy**. I had asked Mrs. McLaughlin about the concern that she has about conditions which are not covered. Do you worry that your daughter may get sick?

Mrs. **Ray**. Yes, I do. She falls quite frequently going up and down steps especially, and I am petrified that she will fall and get a serious injury and, simply because she has the bone condition, it will be excluded. As a matter of fact, even though I don't like to teach my children to lie, I said, "For God's sake, if you fall, say you slipped on a banana skin."

It's a terrible thing. She saw the orthopedist yesterday and he said there is a good possibility that she is going to have to have surgery. He is, however, trying a more conservative approach first.

Senator **Kennedy**. We hear so much in the discussion and debate on national health insurance about the issue of cost in terms of dollars. We are obviously concerned with that cost, with how to deal with the doctors and negotiate fee schedules, with cost containment, and with other factors. We hear so infrequently about the human cost and the human anxiety that you feel worrying about your daughter and worrying about these uncovered conditions requiring treatment. I am sure hundreds of thousands of parents have similar worries and anxieties. It's really a question what this fear means and what its toll is.

There isn't a mother in any Western society in the free world that has this burden of fear for their children—not one. They don't have it in Canada, they don't have it in the Western European countries, they don't have it in other nations of this world. They only have it in the United States and in South Africa.

You know, we have to ask ourselves, as a society, how long will we put up with or tolerate this situation. It is intolerable, unfair, unjust, and wrong. It makes no sense from any point of view.

Mrs. Goldberg, would you answer a few questions now. You're a widow, as I understand.

Mrs. **Goldberg**. That is true.

Senator **Kennedy**. When did your husband die?

Mrs. **Goldberg**. April 1968.

Senator **Kennedy**. What business was he in?

Mrs. **Goldberg**. We had a little grocery and meat store. And out of that little grocery and meat store, he had to pay out $10,000 because Blue Shield would not cover me. I was a risk.

Senator **Kennedy**. You were a risk? I don't quite understand what you are saying. You had a small business. What is your monthly income?

Mrs. **Goldberg**. Are we speaking about the present time?

Senator **Kennedy**. Yes, presently.

Mrs. **Goldberg**. Presently, with all the increases in my social security, and the interest I'm getting on some savings certificates, it is $548 a month.

Senator **Kennedy**. And what is your rent?

Mrs. **Goldberg**. My rent is $268 a month. It was $148.50, and it's now $268.

Senator **Kennedy**. As I understand it, you did have health insurance coverage while your husband was alive; is that correct?

Mrs. **Goldberg**. Only insofar as Blue Cross for me. He had Blue Shield. They wouldn't give it to me. I was a risk.

After he died—I wrote to Blue Shield and I asked them to please cover me. That was in 1968. I was granted Blue Shield in September 1972, which was 8 months before I got my social security card. They weren't taking any chances with me.

Senator Kennedy, I want to say that I wrote to you out of sheer desperation, because I was and am being strangled. I have catastrophic medical bills. We have the rottenest, if I may say it, system. I pay, in addition to what is taken out of my medicare check each month, I pay—well, it's the Blue Cross 65 special, I think that's what it's called. It was formerly $17, and it's now $39 every 3 months. I had to also in desperation take out a policy—not the best, but it paid something—toward hospital bills.

I pay about $500 a year, for a health plan that is far from adequate. These bills I have with me represent a small portion of what I have had to pay. I lost a whole year of bills somewhere. I have been writing and talking to everyone. This is a letter written to the Philadelphia Inquirer by a person angry over changes in medicare. That was me.

Senator KENNEDY. As I understand the point you make on medicare; you're paying more and more for less and less?

Mrs. GOLDBERG. That's exactly it. We are getting less for more.

Senator KENNEDY. As I understand, after your husband died you weren't old enough to qualify for medicare. So you had a period where you were covered, and then your husband died, and then you're left in a gap where you're not covered at all——

Mrs. GOLDBERG. That's right. All I had was Blue Cross.

Senator KENNEDY [continuing]. And you had the same kinds of anxieties that Mrs. Ray and Ms. McLaughlin have. Then when you do qualify for medicare, you find out that you're paying more and more and not getting the kind of coverage which you need as I understand it.

Mrs. GOLDBERG. When I talked about coverage, what kind of a plan is it that is permitted in midstream to change their categories of office visits? That's what they did, very recently, in January. They changed a neurologist's visit, from extended to intermediate, and then they changed the intermediate to brief. Whatever happened to the brief is anyone's guess.

This neurologist, incidentally—and I'm not bringing down the ceiling on him, but I think he's very unfair. In 1972 his fee was $15. Each year since 1972 he has continuously raised it. His fee as of 1978 was $40, and when I saw him 2 weeks ago, he let me know that in September he was going to have another increase.

Now, this is the unfair part. When they changed my category, instead of allowing me $30 on a $40 visit, they now allow me $20.

Senator KENNEDY. Well, what does that mean in terms of what you have to pay——

Mrs. GOLDBERG. What does that mean? I'll tell you what that means——

Senator KENNEDY. Let me see if I understand. Medicare provides so much and you make up the difference?

Mrs. GOLDBERG. Exactly that. I eat up every penny of my income strictly for prescriptions, which are my lifeline. I have a list here of operations that I have had. I have had two carotid artery operations within the last 5 years.

Senator KENNEDY. Do you have to make a choice between food and health care?

Mrs. GOLDBERG. I was going to use this little example. It would be very nice at the end of the month to be able to say, "Can I buy both the panty hose and the lipstick or not." Now, that is exactly what my condition is. As far as my health insurance is concerned, it takes every penny. It costs me a fortune. And, unfortunately, I can't be under one doctor's care. I need five specialists. I have seizures, I have an irritated vocal coptex, I have carotid stenosis, they've called me an orthopedic disaster and so on.

Senator METZENBAUM. Mrs. Goldberg, last December I held some hearings in Ohio on health care costs for the elderly. Several witnesses talked about the problems of getting doctors to accept the assignment and particularly that a very low proportion of doctors accept assignment in Ohio.

Mrs. **Goldberg**. All right, I'll talk on that.

Senator **Metzenbaum**. Have you had a problem in attempting to get the doctors to accept assignment?

Mrs. **Goldberg**. Out of five doctors that I go to for care, one accepts the medicare allowance. He's the only one with a heart. The rest of them, no way.

Senator **Metzenbaum**. The rest of them say they don't want to bother?

Mrs. **Goldberg**. They want me to pay them, and then I get a medicare receipt and that's what I send in.

Senator **Metzenbaum**. You then fill out a simple medicare form, don't you, and then are reimbursed?

Mrs. **Goldberg**. Then medicare gives me what they think is a so-called reasonable allowance.

Senator **Metzenbaum**. Have you had any trouble in filling out the medicare forms?

Mrs. **Goldberg**. Oh, are you kidding? I have filled out so many, I'm a veteran. I'm a veteran at it.

You know, when I was in the hospital in May for some foot surgery, one of the young residents was curious when he saw my file. He counted my admissions to the hospital since 1962, I believe, until 1979. There were 26 admissions, with surgery 12 times.

Senator **Metzenbaum**. About what percentage of the bills you have paid the doctors has medicare reimbursed you for?

Mrs. **Goldberg**. They're a little bit crazy. You can never tell. You can never tell what they're going to return. I honestly feel——

Senator **Metzenbaum**. Could you give us some examples?

Mrs. **Goldberg**. Yes; I'll give you an example.

I honestly feel that sometimes it depends on whose desk that particular claim lands on, because I have already gotten $30 towards the $40 on the neurologist, and I have already gotten $25, and then I sent back a letter when I only got the $20 and I said, "Someone goofed, because——" I don't mince words. I got a letter from them about a month later, and they said I am entitled to a hearing if I'm not satisfied with the amount allowed, but it has to be $100 or more.

Now, what chance do I have? None whatsoever. Every penny I have in income goes for rent, food, and doctor bills. It's very rough.

Senator **Metzenbaum**. Is the cost of coinsurance itself a big burden?

Mrs. **Goldberg**. Of course. When one woman has to pay $168 for rent—and I have looked, I have tried to get out of there and look for something cheaper, and I can't find anything unless I want to live in a distressed area. I have to pay all these differences and all these prescriptions that I am on—I am on five different medications. How much money can I have and how cheerful can I feel? I don't feel one bit cheerful.

I also happen to be a very proud and independent woman. I don't look for a handout. I won't accept any kind of handout, not even from my son, because that's the way I want it. But I will accept, very gratefully, a health plan that wouldn't choke me to death each month. It is distressing, disturbing, downright rotten.

Senator **Kennedy**. Fine. You're a very frank and outspoken lady. Mrs. Buckwalter, we welcome both you and your husband. Would you tell us how old you are?

Mrs. **Buckwalter**. I am 22, and my husband is 27.

Senator **Kennedy**. When was your daughter born?

Mrs. **Buckwalter**. December 23, 1978.

Senator **Kennedy**. And what kind of health insurance did you have when you were married?

Mrs. **Buckwalter**. Absolutely nothing.

Senator **Kennedy**. As I understand it, when you became pregnant you and your husband were looking for medical assistance programs, is that right?

Mrs. **Buckwalter**. We were.

Senator **Kennedy**. What happened when you applied for medical assistance?

Mrs. **Buckwalter**. We applied in August 1978, and at the time my husband was making between $80 and $100 a week. We applied and we received a letter a month later, I guess, saying that our income exceeded the amount by $31.35, and the only way that we would be eligible was if our medical expenses were $188 more. But we had already submitted it, which at that time was $500 or $600.

Senator **Kennedy**. As I understand it, your husband was working at this time, correct?

Mrs. **Buckwalter**. Correct.

Senator **Kennedy**. He was working as a landscaper, and he was making $80 a week and that was $30 a week too much, is that correct?

Mrs. **Buckwalter**. Monthly. That was $31.35 too much a month.

Mr. **Buckwalter**. Excuse me, but if I may interrupt, what had happened is that I had some savings—I used to work for the Government and I had drawn out my retirement, and we were pretty much living on my retirement. Between having this money in a savings account and the minimum amount I was making, it overqualified us, or underqualified us.

Senator **Kennedy**. When your husband's landscaping contracts ran out as winter approached, did you reapply for the medical assistance?

Mrs. **Buckwalter**. We reapplied; yes.

Senator **Kennedy**. And did you get it at that time?

Mrs. **Buckwalter**. We got it—well, they notified us in December, 2 weeks before the baby was born, that we were eligible.

Senator **Kennedy**. Two weeks before the baby was born?

Mrs. **Buckwalter**. Right.

Senator **Kennedy**. After you received this, however, the obstetrician changed the due date to January; is that correct?

Mrs. **Buckwalter**. He changed the due date. We were expecting the baby January 10, and our medical assistance only covered us from October 1 until December 31. Therefore, we were afraid that if the baby was born in January, we wouldn't be covered.

So I went back to the medical assistance bureau on December 22 to reapply, to tell them to extend my benefits, because the baby was due later. We reapplied. My husband was not working at all at the time. We did have some savings in the bank to survive on.

She then sent us a letter saying that we had $270 too much.

Senator **Kennedy**. So you were turned down for your extension, and as I understand it, the principal reason for the turndown was actually that you had borrowed some money from your mother-in-law; is that right?

Mrs. **Buckwalter**. We had received gifts for the baby which were counted as income. We received approximately $100. We borrowed $250 from my mother-in-law to pay the rent, and that was also counted as income.

Senator **Kennedy**. So because you were getting these gifts in anticipation of the baby and you borrowed some money, you were denied the extension?

Mrs. **Buckwalter**. Right.

Senator **Kennedy**. As I understand, the story had a happy ending because the baby was born in December; is that right?

Mrs. **Buckwalter**. Right.

Senator **Kennedy**. What was the obstetrician's bill?

Mrs. **Buckwalter**. The obstetrician charged me $758, and that was to be paid before my 37th week of pregnancy.

Senator **Kennedy**. Did he accept the medical assistance?

Mrs. **Buckwalter**. No; he did not. He looked at me like I was crazy when I asked him. No way.

Senator **Kennedy**. Did he ask that the bill be paid in advance of delivery?

Mrs. **Buckwalter**. Yes.

Senator **Kennedy**. So what did you do?

Mrs. **Buckwalter**. We borrowed money. My brother-in-law cosigned with my husband for a bank loan, and we took that money and paid the doctor, and we're still paying on that loan now.

Senator **Kennedy**. And you also borrowed money to buy a wood stove, which is the only heat in your home; is that right?

Mrs. **Buckwalter**. Right. We borrowed $1,500 to pay the doctor and to buy the wood stove.

Mr. **Buckwalter**. I borrowed a little extra money so I could pay the loan payments off through the winter, when I would not be working.

Senator **Metzenbaum**. Would you be good enough to repeat how much you were earning when you were working?

Mrs. **Buckwalter**. It varied.

Mr. **Buckwalter**. You mean at the time we were applying?

Senator **Metzenbaum**. Yes.

Mr. **Buckwalter**. I had one contract where I worked approximately 1 day a week, for $80 a week. We were living off of that $80, plus the money I had from my retirement savings. I guess that ran out in about December or January.

Senator **Metzenbaum**. How are you going to pay off these loans, the $1,500 and the doctor's bill?

Mr. **Buckwalter**. Well, I'm working now. No problem.

Mrs. **Buckwalter**. Sporadically somewhat.

Mr. **Buckwalter**. I am able to make the payments during the summer months.

Senator **Kennedy**. Did the obstetrician come and deliver your baby?

Mrs. **Buckwalter**. He just made it.

Senator **Kennedy**. And you had a normal and healthy baby?

Mrs. **Buckwalter**. I did.

Senator **Kennedy**. Have you been able to go back to the obstetrician for checkups since then?

Mrs. **Buckwalter**. No, I haven't. I just can't afford it right now. Also, I had open heart surgery in 1966. During my pregnancy I had to make visits to Baltimore to make sure everything was OK and to see if my heart was under any strain. I have to return out there sometime this summer when I can afford it. The baby naturally has to go to periodic visits to the pediatrician, which we have to pay for out of what money we do have.

Senator **Kennedy**. How do you afford to pay for those?

Mrs. **Buckwalter**. Her doctor visits?

Senator **Kennedy**. Your visits to Baltimore.

Mrs. **Buckwalter**. I haven't been back. With EKG's and X-rays and things, that will probably run——

Senator **Kennedy**. What about your pediatrician?

Mrs. **Buckwalter**. I pay him, if I have the money, when I go. If not, I send a payment when I have the money.

Mr. **Buckwalter**. The baby comes first before either one of us. She goes for regular visits, and it's paid up.

Senator **Kennedy**. Mrs. Buckwalter, when you were 10 years old you had some open heart surgery. Do you have insurance today?

Mrs. **Buckwalter**. No, I don't. My husband looked into a low option plan, and I don't think the insurance company had any knowledge of my heart disability. They told him it would be $70 a month for a low option plan—that's without their knowledge of my heart condition.

Mr. **Buckwalter**. And that's without pregnancy insurance, too. I have an independent automobile insurance agent, plus he sells health insurance. I didn't mention anything about pregnancy insurance, but he specifically said "You're better off if you don't have it". I didn't say anything in reply to him, because I thought he was crazy. But it was to the point where he would write the policy if I excluded pregnancy insurance.

Senator **Kennedy**. Mr. Buckwalter, how is your baby now?

Mrs. **Buckwalter**. She's doing fine. She's walking, just starting to walk now, and I'm afraid she is going to fall. Our house is very small and there's a lot of things around that she could fall on. I have to keep an eye on her all the time, because I'm afraid she'll fall and I will have to take her to the hospital.

Senator **Kennedy**. Do you worry about the possibilities that your baby may get sick and that——

Mrs. **Buckwalter**. I certainly do. I worry about the possibility that all of us might get sick.

Senator **Kennedy** [continuing]. And what it would mean in terms of payments, or whether you would be able to get coverage, given your experience with some doctors, whether you could get their attention or their treatment, or whether your child would be able to get the proper kind of care; is this a matter of concern to you and your husband?

Mrs. **Buckwalter**. Yes, it is.

Mr. **Buckwalter**. Of course, now I'm making over $150 a week and I wouldn't be eligible for any kind of State assistance, I guess.

Senator **Kennedy**. Does this make any sense to you? I mean, you see where you are $30 a month over a certain limit and then you're not eligible; you're eligible sometimes and not eligible at others; the dates are cut off just prior to the time the baby is expected, and just through either luck or circumstance the baby does come earlier so you are covered; but otherwise you would have had more indebtedness. I mean, this sort of roulette or lottery system of health care, when you're talking about dealing with real human beings, does any of that make any sense to you?

Mrs. **Buckwalter**. No. I got so frustrated with social services that we just said the hell with it, we're not going back. We kept receiving letters—she wanted 3 months past statements of this and that, and we would send it, and then she would send us another form asking for the same thing. We called the supervisor and she was unobtainable. We couldn't find her——

Mr. **Buckwalter**. It took a month for her to get back to us.

Senator **Kennedy**. You think of the paperwork and time that people take in terms of the processing of all of these claims, the cost of that is breathtaking, I would imagine.

Mrs. **Buckwalter**. It's a mess.

Senator **Kennedy**. It is, and we know that it is from other hearings that we have had. That's why we need a simplified system that provides health insurance coverage as a matter of right.

We can eliminate a good deal of the bureaucracy, but I think most importantly we should relieve the fear and anxiety which has been expressed so well by all of our witnesses here today.

I want to give you my assurance that the health care system which I support would respond to these needs. I am hopeful we can gain its acceptance. We realize it's an uphill battle, but we're going to continue to work at it.

Howard, do you have any questions?

Senator **Metzenbaum**. I want to thank the panel for being here, and I have no questions.

Senator **Kennedy**. We thank you very much for your presence here. It has been enormously interesting. You have illustrated the problem and have given us the dimensions of the problems through your different experiences.

Mrs. **Goldberg**. May I make one comment?

Senator **Kennedy**. Yes, ma'am.

Mrs. **Goldberg**. We need the plan, and I am going to frankly plagiarize a line from the song that sums it up best: "There's no time for the waiting game."

Senator **Kennedy**. Very good.

OK. We're going to work with you, "You can depend on that," to quote a—— [Laughter].

Thank you very much. We'll excuse you.

Our second panel will focus on women and drugs. We have Sid Wolfe, director of the Health Research Group, and Barbara Seaman, author and cofounder of the National Women's Health Network, New York City.

Dr. Wolfe, we welcome you back and look forward to your testimony.

STATEMENT OF SIDNEY M. WOLFE, M.D., PUBLIC CITIZEN'S HEALTH RESEARCH GROUP AND BARBARA SEAMAN COFOUNDER OF THE NATIONAL WOMEN'S HEALTH NETWORK, NEW YORK CITY

Dr. WOLFE. Although I am supposed to be discussing women and drugs, I really can't help making at least a couple remarks about what we have just heard.

One thing I am reminded of is about 10 years ago the then president of the AMA, Dr. Milford Rouse, said: "Health care is a privilege, not a right." We have just heard an hour of testimony from people who can't get health care because they're old and don't have enough money, even though medicare is supposed to take care of their health insurance, or who are not quite poor enough to be destitute, and therefore are not covered by medicaid and also can't afford care. What the president of the AMA said 10 years ago is still true.

In this country we don't have a right to have health care; we can only have it as a privilege if we're rich enough. That is simply a disgrace, to say the least.

Another disgrace is that a large amount of money in this country is spent on drugs, hospitalizations, and surgical procedures that take healthy people and make them sick. If we freed up even a good percentage of this money to make sick people healthy instead of making healthy people sick, we would also be in better shape than we are now.

Last year doctors wrote about 900 million prescriptions for drugs in the United States.[1] Although there are slightly more women than men in this country, there were far more prescriptions written for women than for men—536 million for women and 363 million for men, or 1½ times as much.[1] When we get down into the 20- to 39-year-old age bracket, where most people are by and large healthy, we have two times more prescriptions, 2.1 times more prescriptions for women than for men—65 million for men and 137 million for women.[1]

As you mentioned in your introductory remarks, one of the categories this is clearly seen in is minor tranquilizers such as Valium. In this group the ratio is even higher than overall. You quoted figures for men and women of all ages but in the 20 to 39 age group there were 5.3 million prescriptions of minor tranquilizers for women and 2.4 million for men, which is 2.2 times more for women.[1]

Other classes of prescription drugs widely prescribed to women in this age range, and some older women, include the estrogen and progesterone hormones, virtually never used on men except in the case of estrogens in the treatment of cancer. Whether tranquilizers or hormones, a large portion of the drugs prescribed to the 20- to 39-year-old women—and in the case of the menopausal estrogens to older women—have the potential to and actually succeed in making healthy women sick.

The way healthy women become victims of this gross overuse and misuse of drugs is that the drug companies, through drug-oriented practicing doctors, make women feel that the drug option is the only viable one. Do you want to be anxious or take a tranquilizer? Do you want to become pregnant or take the pill. Do you want to lose your baby, have a miscarriage, or take DES or, more recently, progestins? Do you want to lose your femininity or take menopausal estrogens? Other options take too long to discuss or are too nonmedical, such as getting at the situational causes of anxiety.

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[1] National Disease and Therapeutic Index, 1978 IMS America. Data includes prescriptions where sex of patient was identified—96 percent of prescriptions.

Despite the 41-year-old animal evidence of the carcinogenicity of estrogens, and evidence of 10 or 15 years of the dangers in animals of progestins, human evidence of blood clots from the pill now 17 years old, and human evidence of cancer and birth defects from these progestins and estrogens 5 to 8 years old, hundreds of thousands of women and their children are still unnecessarily exposed to estrogens and progestins each year in circumstances where there is either no evidence the drugs are effective, or nondrug alternatives have not been fully explained and offered.

One example is the birth control pill, which rose to a peak of 64 million total prescriptions filled, representing use by about 8 million women in 1975. But the number of prescriptions has dropped in the last several years down to 48 million in 1978, a drop of about 25 percent indicating that now roughly 6 million women are using the birth control pill.[2]

In addition to the older evidence of increased occurrence of strokes, heart attacks, blood clots, hypertension, gall bladder disease and other serious long- and short-term effects, new human studies have suggested—and they're being followed up with more studies—an increased risk of cervical cancer, malignant melanoma, and pituitary tumors. It is this latter risk information combined with more and more studies confirming the older complications which seems to have caused many women to switch to safer forms of contraception.

It is 8 years since human evidence of cancer in DES daughters, and the same interval since human evidence of serious birth defects—short arms and legs as with Thalidamide and congenital heart defects—in children whose mothers were given progestins, synthetic analogs of the sex hormone progesterone. It is important to note that one of the main uses of these progestins like DES is to prevent miscarriages, and like DES, there is no evidence that these drugs work to prevent miscarriages. The use of DES and other estrogens in pregnancy for preventing miscarriages or as a pregnancy test has been prohibited and approval withdrawn by FDA since 1972, and progestins in pregnant women since 1974.

There has been a substantial fall in the use of these two classes of drugs for pregnant women, but despite withdrawal of approval by FDA and two FDA drug bulletins to doctors on the topic, large numbers of pregnant women are still, as of 1978, being given these drugs.

In 1978, for example, there were 75,000 prescriptions written for progestins for pregnant women, including 31,000 prescriptions to prevent miscarriage, a purpose for which there is no evidence the drugs are effective, and 17,000 prescriptions as a pregnancy test,[3] although equally effective, cheaper, and safer pregnancy tests are available.

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[2] National Prescription Audit, I.M.S. America, Inc.

[3] National Disease and Therapeutic Index, 1978 I.M.S. America, Inc.

Senator **KENNEDY**. What does that say? Here the FDA has given these bulletins out not to use it, and the doctors are still prescribing it for women. What does this say to you? It doesn't seem to me to make any sense at all, and yet the doctors continue to prescribe it.

You give the figures here in your own testimony.

Dr. **WOLFE**. It does not make any sense at all.

Senator **KENNEDY**. What's your advice to women; what's your message to women?

Dr. **WOLFE**. The message to women is that if you are pregnant and any doctor tries to give you a prescription for an estrogen, such as DES, or any other estrogen, or progestins such as Delalutin, Provera or Duphaston to name three big sellers, you should ask the doctor:

> Did you know that this drug isn't approved by the FDA? Did you know that this drug doesn't work if it's being used to prevent miscarriages, and did you know that this drug causes human birth defects, or cancer in the case of DES?

We have argued, and I think a good case can be made, that if doctors were forced to give out to women in their offices a piece of paper that said, "Not approved, doesn't work, causes birth defects or cancer", no one would get this prescription. The FDA has recently, long after they should have, put out patient package inserts for progestins, and that is an improvement. But these are only looked at after the woman leaves the doctor's office, goes to the drug store and goes home. Written informed consent in the doctor's office would wipe out the prescribing of these drugs to pregnant women. Women would never consent were they informed about this kind of abuse.

The leading protestin prescribed to pregnant women was Delalutin——

Senator **KENNEDY**. Just before we leave the question of the patient package insert, Senator Metzenbaum was interested in this point and I wanted to get your views about the nature of the information. There have been several experts who claim the effectiveness information on contraceptives may not be complete and may be misleading.

Have you heard that comment made, and if so, are there any suggestions you would make?

Dr. **WOLFE**. Yes. The area of informing patients as to what the benefits and risks of drugs are is a new one, and I think the FDA is learning that it needs to write the information more simply, at a more elementary level. FDA can't even inform doctors adequately as to what the benefits and risks are, or at least there are a number of doctors who seem to resist the knowledge that the drugs are dangerous and have no benefits. There needs to be much clearer information, simpler information, putting priorities on the more serious adverse drug reactions in any patient information that goes out.

But beyond that, in a case such as this, we're really talking about a drug so dangerous that we need informed consent in the doctor's office. The risks of some of these drugs are far more than the risk of a number of surgical procedures for which we now, as a matter of practice, have informed consent in the doctor's office. I think they both need to be in a very simple language so that the patients can understand them.

Just as extraordinary as the continued prescribing of progestins to pregnant women is the prescribing in 1978 of DES 5000 times as a pregnancy test. As I mentioned before, administration of DES and estrogens to pregnant women has been withdrawn as an indication for these drugs a long time ago. And yet there is a hard core of doctors, who are either ignorant enough or callous enough or whatever, so that they continue putting pregnant women at risk with a drug known to cause cancer in daughters, increased amount of cancer in mothers, and what appears to be some evidence of birth defects and possibly cancer in the sons. This has got to stop.

The prescribing of either progestins or estrogens in pregnant women is an open-and-shut case of malpractice for the doctor, and also for the drug companies. The drug companies, for decades after it was clear that DES didn't work to prevent miscarriage continued selling it for this purpose. The burden is on them to exhaust every possible remedy to undo the bad education they gave doctors who started prescribing these drugs.

Whether it is a personal visit to every physician who is identifiable as prescribing it, or a letter every few months to doctors until the prescriptions go down to zero, instead of 75,000, whatever is necessary needs to be done. The legal liability of these companies is going to remain high until they have done much more than they have.

Quietly deleting from a two-page list of indications the one for pregnancy I don't think is enough, or even a box warning, because doctors don't read the Physicians' Desk Reference every year thoroughly, or ever thoroughly in some cases.

Another outrage continues—which I have to say I find hard to believe. I have a certain amount of cynicism for the drug industry and practicing doctors, but these figures I think even outdo my cynicism in what they say.

In 1978 almost 200,000 prescriptions were written for estrogens, including 53,000 for DES, to suppress lactation or relieve breast engorgement in women who had just delivered a child but who didn't want to nurse their child. It is now a year-and-a-half after an FDA Advisory Group recommended this should not be an approved indication any more. FDA proposed withdrawing the indication, but they have gotten caught up in a lot of bureaucratic red tape and it is still an approved indication, technically. We're talking about 1 to 3 days of a reasonably large dose of DES, which amongst other things is a carcinogen, and also increases the risk of blood clots in the mother in this period right after giving birth to a child.

But again, like the case of estrogens to prevent miscarriage, this is a drug not needed at all. Some hot compresses, a couple of aspirin, or other mild pain relievers, will work for the small number of women who really have severe problems with this. Most women don't have severe problems and yet are given, on a prophylactic basis, these drugs.

Menopausal estrogens is an area where you, Senator Kennedy, have had a major impact. The hearing you conducted shortly after the human evidence that these drugs cause cancer preceded by a long time the long-delayed FDA action and I think it played a major role in getting many women to stop using these drugs.

It has been estimated that 35 percent of endometrial cancer in the lining of the uterus in the United States may be associated with the use of menopausal estrogens. This amounts to about 9,450 of the estimated 27,000 cases per year.[4]

This is based on two kinds of information. One, how many women use the drugs, which varies somewhat from part to part in the country, and what the increased risk of cancer is in those that use the drugs. It is as high as a twenty-fold increased risk of uterine cancer in people who have used the drugs for 15 to 20 years. You might ask why are women using menopausal estrogens. Even though they may need them for a month or two, why are they using them for 15 or 20 years? Again, as you have asked a number of times this morning, it doesn't make any sense at all. It represents exploiting women into believing that once they have reached a certain age, that unless they take estrogens for the rest of their lives they're not going to be intact women. In direct proportion to the length of use of these drugs, risk of cancer increases.

In addition to cancer in the lining of the uterus based on findings by National Cancer Institute epidemiologist Dr. Robert Hoover,[5] of a twofold increase of risk of breast cancer in women who had used menopausal estrogens and who had been followed up for 15 years or more, Dr. Greenwald of the New York State Health Department has estimated that the use of these drugs, these estrogens, could account for as much as 15 to 20 percent of breast cancer if the Hoover findings are correct, which they appear to be.

One of the reasons this hasn't been found earlier is that it takes a long time after you use estrogens for breast cancer to show up, and unless you wait a long enough period of time, you might be deluded into thinking there isn't any increased risk.

On page 4 of the testimony I include a cartoon which basically says "Does estrogen cause cancer?" And the answer, in cartoon form is "Only in Mice", and the caption below says there may be some evidence that estrogens "decrease" the risk of cancer. This pamphlet was distributed through doctors to women as recently as the early seventies and play a big part in misleading women into thinking estrogens might decrease the risk of cancer instead of causing the large increase that they do.

On page 5 of the testimony we see at least a little bit of good news. I mentioned before that in direct proportion to convincing women that they would lose their femininity unless they took estrogens the prescriptions for estrogens rocketed up, from 2 million in early 1964, when they were first used, to 26.7 million prescriptions in 1975, just before the paper showing they caused cancer, your hearings, and later FDA hearings. Since then there was been a 40 percent decrease, from 26.7 million down to 16 million prescriptions last year. This still means there are 16 million women using estrogens, mostly for menopause, probably representing the use in about 2 million women.

[The cartoon and chart referred to follows:]

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[4] Greenwald, Peter, N.Y. State Health Department. Presented at the NCI Conference on Cancer, Sept 27, 1978.

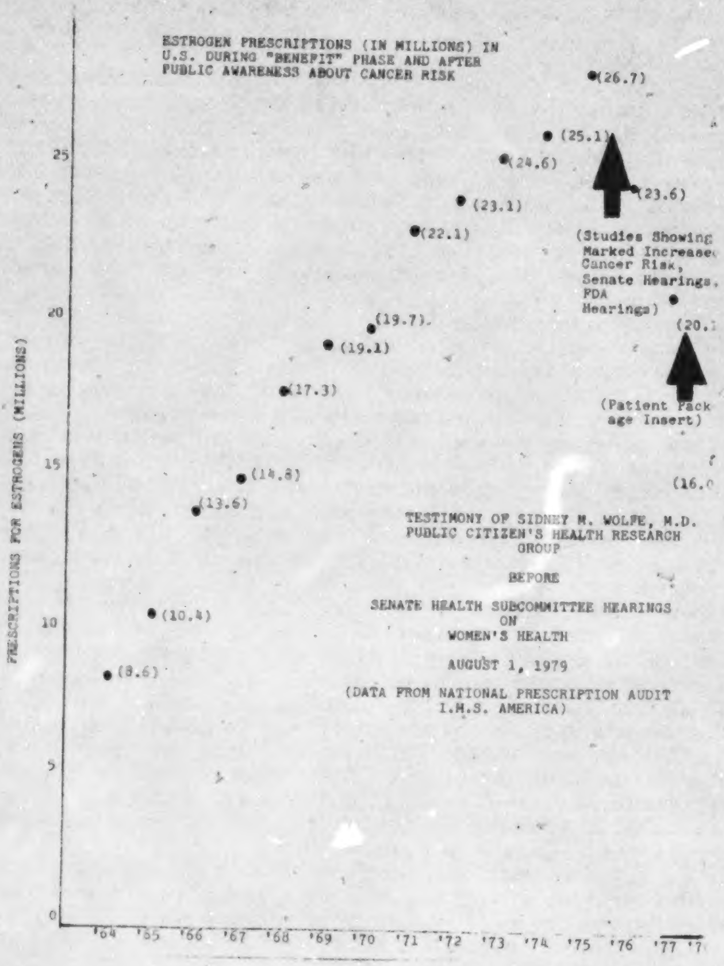
[5] New England Journal of Medicine, Aug. 19, 1976 (vol. 295, p. 401).

Does estrogen cause cancer?

ONLY IN MICE
ESTROGEN

No. In fact, there is now some evidence suggesting a LOWER incidence of cancer in women taking estrogen. Only in mice have estrogens been found to cause cancer, and then only when given in massive doses.

FIGURE 1



ESTROGEN PRESCRIPTIONS (IN MILLIONS) IN U.S. DURING "BENEFIT" PHASE AND AFTER PUBLIC AWARENESS ABOUT CANCER RISK

TESTIMONY OF SIDNEY M. WOLFE, M.D.
PUBLIC CITIZEN'S HEALTH RESEARCH GROUP

BEFORE

SENATE HEALTH SUBCOMMITTEE HEARINGS
ON
WOMEN'S HEALTH

AUGUST 1, 1979

(DATA FROM NATIONAL PRESCRIPTION AUDIT
I.M.S. AMERICA)

Dr. WOLFE. It is unlikely that most of these women would use or keep using these drugs, often for more than 2 years, if they were fully informed of the risks as well as the benefits. Again a case can be made for informed consent in the doctor's office in addition to patient package inserts.

Well, what can be done? The decrease in use of cancer-causing estrogens in healthy women of child-bearing or menopausal age is a hopeful sign. It shows that even when drug companies market dangerous products, doctors prescribe them and the FDA fails to adequately regulate them, informed women can take matters into their own hands and say stop. Other hopeful signs are the growth of product liability suits against estrogen manufacturers and other drug companies so that they have to begin paying all the costs of doing business and may be more cautious in marketing such drugs in the future.

Beyond more information flow and the beginning of exposing the drug industry to the risks as well as the benefits of the marketplace via product liability is the role of Government regulation via FDA or HEW. The epidemiological studies showing menopausal estrogens cause uterine cancer should have been required by FDA long ago, given the knowledge that estrogens are powerful animal carcinogens. Better testing of drugs with public disclosure of test results before marketing would keep many drugs which add nothing to existing therapy of disease off the market. FDA now has the authority to do much more than it is to better regulate drugs. It is up to this committee to continue its fine record of oversight over this agency.

I believe it is possible to preserve those drugs which clearly improve or maintain the health of women, or men, and eliminate or reduce the use of those, such as estrogens, progestins and tranquilizers, which make healthy women sick.

Thank you. I would be glad to answer any questions.

Senator KENNEDY. We have seen, as your testimony has pointed out and as the chart shows, that there has been some improvement and a decline in the use of some of the drugs, certainly estrogens.

But would you not agree with me, that there is still a long way to go in this area for women, and that the patient package insert is one area where a great deal more can be done.

In our new drug legislation we have informed consent provisions. We also provided under that legislation the ability to prescribe certain types of drugs, limiting them to certain types of facilities or medical personnel with certain kinds of experience in an attempt to try and get some handle on this.

I don't know whether you have additional ideas or suggestions about how we can try and protect women in this country from overprescription of drugs and the very significant health hazards which they are subjected to because of the type of conduct which you have outlined in your testimony.

Dr. WOLFE. I think the two approaches, the regulatory and the informational approach, buttressed up by the beginnings of some lawsuits are important in lessening these hazards to women. There has recently been the first judgment against Lilly for DES, a half-a-million dollar award to a DES daughter in the last several weeks. That will hopefully be the beginning of a lot of recovery for damages to DES victims. Unfortunately, it's after the fact, but once drug companies have to start paying for this, instead of just reaping the benefits of drugs, that will be a third factor beyond Government regulation and information.

One of the most important roles of Government regulation, aside from banning drugs or restricting them, if possible, is the informational role. It's somewhat late in the game that FDA has started using it. It's a welcome relief that they are starting to regulate information flow by requiring patient package inserts. But the extraordinary resistance that comes up in informing women about drugs needs to be commented on. Both the medical profession and the drug industry try to block, via lawsuits, the FDA informing women about estrogens, claiming that this would interfere with the doctor-patient relationship.

It is time to start interfering with those kinds of doctor-patient relationships, and the more authority to do that, the better, as far as I'm concerned. No woman, properly informed, would take a number of these drugs. The reason that their use is decreasing is mainly because women are more informed, partly because the FDA is helping to inform them. So whatever can be used within the law we support.

Senator KENNEDY. OK. Thank you.

Barbara Seaman, we would like to hear from you. I think this is a good point of introduction, to discuss why women continue to use these drugs, particularly when they pose such a very significant danger. I hope you will be able to comment as you shape your testimony.

Ms. SEAMAN. The FDA, as you know, makes it very difficult for us to either obtain safe alternatives, or to obtain accurate information about the safe alternatives.

I am a cofounder of the National Women's Health Network, and author of three books: "The Doctors' Case Against the Pill," "Free and Female," and "Women and the Crisis in Sex Hormones." Thank you for inviting me to testify.

If I were asked to write a job description for the FDA Commissioner, I could make it brief: "Must be someone who is skilled at talking out of both sides of his mouth, appeasing the consumer while playing ball with industry and the AMA * * * Reward for service, a very high-paying drug company post."

Gentlemen, I do not think the FDA will ever straighten up its socks until Commissioners are appointed from the ranks of consumer advocates. Let's have a Ralph Nader, a Bess Meyerson, or a Betty Furness. And if we must have another male physician, let's have Sid Wolfe. [Laughter.]

At the Network we are deeply committed to finding and promoting harmless methods of contraception. In this the FDA should be our ally, but the opposite seems generally to be the case.

Today I would like to talk to you about cervical caps and FDA's campaign to keep them unavailable. I will also mention Depo Provera, a dangerous method that is still quite widely used. The one is safe and is being banned; the other is hazardous, but FDA doesn't care to stop its abuse.

The cap, a thimble-like device which stays in place by suction, is one of the oldest contraceptives known to woman. In ancient Sumatra it was molded out of opium. In Europe, in the Middle Ages, it was made from beeswax. The modern rubber cap was perfected in Germany in 1838. In many European countries it outsold the diaphragm 4 to 1. For a time the cap was also made in the United States, but was discontinued with the advent of the pill.

Senator, I do have some drawings, if you think it would be suitable to put them in the record. Dr. Sorosh Roshan is here and she has some caps if anybody wants to see what they look like later.

In the course of my work as a journalist, I have interviewed over 8,000 women about their birth control practices. Many prefer not to risk the Pill or the IUD, but are at a loss to find alternatives.

I learned about the cap from European women, and included a chapter on it in my latest book, which was published in 1977. The chapter was serialized in Family Circle, and I discussed it on Phil Donahue's TV program as well as other talk shows.

Then I started to get inquiries from people about where they might find the cap. I spoke to some people that I know at the Ortho Pharmaceutical Co. about reviving it. They're one of the companies that used to make it. I was told, candidly, that it was a low profit item which might cut into spermicide sales.

One of the main distinctions between the cap and the diaphragm is that the cap does not require much spermicide, if any, and the diaphragm requires a great deal of spermicide. The main profits from the diaphragm are actually from the spermicides that accompany it and have to be used as a backup. So it is a far more costly method to the consumer.

I was told by Ortho they weren't interested in reviving the manufacture of the cap. I suggested to people who were interested in using it that they might order it from England, and a number of people started to do so. The physicians and clinics and paramedics who are using the cervical cap claim that they're having a very good experience with it, that many of their patients greatly prefer it to the diaphragm.

I am attaching several letters to that fact which are appended to my testimony.

So the cap was in use in this country for about a year, in a small way, and particularly in New England. It became very popular in New Hampshire and to some extent in parts of Massachusetts, maybe because New Englanders are thrifty and it's a very thrifty method. [Laughter.]

So the cap has been in use in this country for about a year. The doctors and clinics were getting it from England. Then in 1978 I received a call from Dr. Michelle Harrison, who is a member of the National Women's Health Network, and who was then a family practitioner in Princeton, N.J. She was quite upset and she told me that her latest cap shipment from England had been seized by the FDA.

I have with me the FDA's papers on the seizure, and the hearing. She was asked to come to a hearing.

Senator KENNEDY. Is there an application in now to FDA for this device?

Ms. SEAMAN. Of course not, because no American manufacturer wants to make it, because there's no profit in it. We went back to the companies that used to make it, and they said they don't want to make it, that it would just reduce spermicide sales.

So we are importing them from England. You can't put in a new drug application if you don't have a company that wants to make something in this country.

Senator **Kennedy**. You're suggesting that the only reason is because—not because of any safety factors, but purely because of the economic factors?

Ms. **Seaman**. Well, there are two factors which I get to in my testimony. In terms of the drug companies, it's the economic factors and the fact that it would reduce the spermicide sales. Not only is a cap very inexpensive to make, but also it would cut greatly into the spermicide market were it to become really popular.

Second, there is a medical economics factor, too, which is that paramedics are doing a lot of the fitting on the caps. There is a tendency in this country, Senator—let me backtrack for a moment.

To the busy doctor, time is money. The barrier methods of birth control, such as the diaphragm and cervical cap, are not cost effective to him or her. It can take an hour or two hours to train a beginner on how to use these old-fashioned barrier methods. But once she's properly trained, these methods are 99 percent reliable and they are almost completely safe. There have never been any major side effects from them, as you know.

Now, as women are getting more and more disillusioned with the pill and IUD, and going back to the old-fashioned barrier methods that many of their mothers used, doctors are not entirely happy about this because it only takes a minute to write a pill prescription and push it across the desk. It only takes 3 minutes to insert an IUD in somebody's uterus, and you get $75 or even $100 for that. And then the chances are you'll have to take it out again and treat her infections and maybe fish it out of her abdomen after it has perforated. So you get a real good business from the pills and IUD's, especially with all the side effects.

Now, the doctors don't like spending an hour or two fitting a beginner with a diaphragm or cervical cap, so what is happening in many parts of the country is that paramedics are taking over. They're taking it away from the doctors. There are paramedics and nurses who are now birth control counselors, and the only things they use are the safe methods. They are getting a reputation in many parts of the country for being much more conscientious in teaching women to use the barrier methods, because they're willing to use much more time.

In fact, many gynecologists resent this terribly. They feel very threatened by it. They don't want to take the time themselves, but they don't want to lose the business either. I think that's why the Medical Advisory Committee of the FDA, the decisive committee, moved to ban the cervical cap. So I think this whole question of the FDA committee, which tends to have doctors who are very political, very AMA-oriented, and many of whom are working for drug companies indirectly, who are doing research for drug companies and taking grants from them, is something that is very important to look into.

I understand that some of these medical advisory panels are getting more and more power at the FDA. I don't think that that's a good development.

In any case, on April 3 the FDA actually published in the Federal Register a ban on the cap. Attached to my testimony I have a number of letters and descriptions from clinics and doctors who are using them and like them very much.

In contrast to the situation with the cap, FDA has refused to take any serious action against Depo Provera. The Women's Health Network has a registry and we are collecting reports from Depo Provera victims which we would be very happy to share with you.

As you know, Depo Provera is an injectible progesterone that is very widely used as a contraceptive shot, particularly for minority women and institutionalized women. FDA could certainly take action to prevent it from being used. As far as we have been able to determine, it has not sent out any letters to physicians urging them to stop the use of it and reminding them that it's not an approved contraceptive.

Do you know, Sidney, whether it has sent out anything?

Dr. **Wolfe**. What it has done, and it may take several years, is notify the company, Upjohn, that it is not going to approve it as an injectible contraceptive. On the other hand, as you have said, they have really not covered themselves in the interval and warned doctors not to use it. The last time we looked, there were well over 10,000 uses of it during the course of a single year, and that's probably only a small chunk of them because it probably doesn't cover clinics and other places. So I think between now and whenever they finalize their decision not to approve it, it's going to stay on for other purposes. They need to warn doctors more than they have.

Ms. **Seaman**. On the subject of institutionalized women, I feel impelled to say something about the neuroleptic drugs. I know you're going to be having hearings on the psychiatric drugs later, but the same institutionalized women who are getting Depo Provera shots are often getting the neuroleptic drugs, too. These drugs have a potentiating effect on each other, and the patients are irreversibly disabled about half of the time.

Now, the neuroleptics are the so-called antischizophrenic agents, and they include such brand names as Thorazine, Mellaril, Prolixin, Trilafon, Navane, Haldol, Loxitane, and Moban. As early as 1957, when these drugs were first available on the market, an article appeared in Europe which described a Parkinson-like syndrome connected with them. The condition is known as tardive dyskinesia.

It consists of involuntary movements of the face, trunk, and extremities. It's very incapacitating, and many people have trouble chewing, swallowing, and speaking. Tardive dyskinesia is occasionally fatal. As more and more patients have been on these drugs longer and longer, it has finally emerged that the frequency of tardive dyskinesia is around 45 percent for outpatients on these drugs, and 55 percent for those who are hospitalized. In other words, half of the people who take these drugs for more than a short period are going to be crippled by them.

As a rule, the patients are not informed of this possibility, although two States, Connecticut and New York, have just advised their psychiatric hospitals to get informed consent on these drugs. And later, when the symptoms develop, about half the patients claim to be unaware of them.

If tardive dyskinesia is so common—and it is—why aren't we more alert to it? The answers are most disturbing.

The condition tends to develop when the drug is reduced or withdrawn, and in most cases the only way to stop the symptoms is to put the patient back on the drugs and to raise the dose and keep raising it. This is because the drug somehow destroys certain normal pathways of the brain, and continuing on the drug masks the destruction of these pathways.

In other words, once a person is started on this group of drugs, she or he apparently faces a 50-percent chance of having to remain on them for life. Now, that's a very nice business for manufacturers and for the psychiatrists who control the prescription pads.

A second reason we don't hear more about tardive dyskinesia is that many of the patients who have it are, of course, locked away in institutions and out of view.

Now, in mentioning the patient, I said "she" first, and there was a good reason for that. It appears that at least two-thirds of the prescriptions for neuroleptics, and for other psychiatric drugs, are written for women. When a woman has problems, doctors tend to think that perhaps they are all in her mind. When a man has problems, they are usually construed as real.

For identical complaints, doctors do a much more thorough physical workup on husbands than on wives, and that's still going on. This is a new study.

In medical journals, the ads for psychiatric drugs and the pictures often seen to carry this message: "Doctor, get her off your back. Get her off her husband's back. Shoot her up and shut her up with our product."

In theory, the neuroleptics should only be prescribed for persons with schizophrenia and certain other specific diagnoses. In fact, the medication is often used to maintain order in institutions, or to control undesirable behavior in outpatients, especially in women. This has become a way of keeping annoying women under control.

A large proportion of the persons given Thorazine and the others do not have the specific conditions for which they have been approved.

Finally, tardive dyskinesia appears less likely to occur if the lowest possible dose is given for the shortest time, and if the patient takes a regular holiday from the drug. I believe that a search of pharmacy records would reveal that it is not uncustomary to prescribe many times the recommended doses for patients who remain intractable. There is enormous abuse in this area with the dose range. Many psychiatrists pay no attention whatsoever to the recommended dose range, and they hold to the theory that you just keep increasing and increasing and increasing until finally you get the patient under control.

We talk about mind control in Nazi Germany and in Russia, but I fear that in the way we're using this particular group of drugs that we are perhaps almost as bad. I think it's a major scandal and

I urge this committee to do a thorough investigation of neuroleptic abuse when you get to the mind drugs next fall.

Senator KENNEDY. Thank you very much.

We are going to be dealing with these drugs and the prescription of these drugs to women in a separate hearing. But I wanted to at least point out what some of the problems were during the course of this hearing. You have given us a good deal to think about in your testimony today, and we're very grateful for it.

Ms. SEAMAN. Thank you, Senator.

Senator KENNEDY. Sid, we want to thank you very much for your presence today, and we look forward to being in touch and working with you in the future in this area.

We have a final panel this morning which includes witnesses who will focus on the impact of cancer trends and treatment of women, the steps which must be taken if women are to become first-class citizens in terms of health insurance and access to good health care, the steps that must be taken if women are to become full participants in careers of health and science.

Our next panel consists of Dr. Linda Rae Murray, president of the Cook County Housestaff Association; Mr. Larry Garfinkel, assistant vice president for epidemiology and statistics of the American Cancer Society; Dr. Anne Briscoe, president of the Association for Women in Science Educational Foundation; and Ms. Elli Smeal, president of the National Organization for Women.

STATEMENTS OF LARRY GARFINKEL, ASSISTANT VICE PRESIDENT FOR EPIDEMIOLOGY AND STATISTICS, AMERICAN CANCER SOCIETY; DR. LINDA RAE MURRAY, PRESIDENT, COOK COUNTY HOUSESTAFF ASSOCIATION; DR. ANNE M. BRISCOE, PRESIDENT, ASSOCIATION FOR WOMEN IN SCIENCE EDUCATIONAL FOUNDATION; AND MS. ELEANOR SMEAL, NATIONAL ORGANIZATION FOR WOMEN, A PANEL

Senator KENNEDY. Mr. Garfinkel, why don't you proceed.

Mr. GARFINKEL. Mr. Chairman, my name is Lawrence Garfinkel. I am assistant vice president for epidemiology and statistics, American Cancer Society. I very much appreciate the opportunity to assist the committee in collecting data on health problems in American women, specifically with respect to cancer.

Today I am going to discuss some of the scope of the problem and some of the trends in cancer in American women, particularly as it refers to the mortality trends.

The American Cancer Society estimates that 388,000 American women will get cancer in 1979, and that 180,500 women will die of the disease. It is the second highest cause of death in the United States after diseases of the heart. In women age 30 to 54, cancer is the leading cause of death. Cancer occurs more frequently in men than in women. In 1977, the age adjusted death rate in American men was 164.5 per 100,000 population; in women, it was 110.0 per 100,000 population.

Breast cancer, as you know, is the most common site of cancer in women. It is the most frequent site of cancer in ages 35 to 74. In older women, over 75, colon-rectum cancer is the most common type. In younger women and girls, leukemia is the most common cancer. Breast cancer is also the second most frequent site in young women 15 to 34 years of age.

Despite the fact that we have heard so much in recent years about the increase in cancer, a large part of the increase in the number of cases is because the population is increasing, and there is a larger proportion of older people than years ago. Age adjusted cancer death rates in American men have increased, but in women the cancer mortality rates have decreased 8.5 percent in the 25-year period between 1950 and 1975.

Recently, we analyzed the trends in the average cancer death rates for various sites of cancer in the 3-year period 1974–76 compared to the average cancer death rates in 1949–51. There have been considerable differences in the trends for different sites of cancer in women. The largest decreases have occurred for uterine cancer—mostly for cancer of the cervix of the uterus—where the decrease has been 60 percent in the 25-year period. Although the decrease started before 1950, there is no doubt that cancer control efforts, education about early warning signals of uterine cancer, and the widespread use of the Pap smear, have accelerated the decrease.

Stomach cancer in American women has decreased by 66 percent in 25 years. We are still not certain of the reasons for this decrease. Some cancer scientists have suggested that increased use of refrigeration and additives that retard spoilage of food may be the key factors. The stomach cancer death rate of 3.3 per 100,000 women in 1975 in America is one of the lowest in the world.

Other sites of cancer for which mortality rates have decreased in women in the past 25 years include colon-rectum, 22 percent, bladder cancer, 36 percent, and leukemia, 9 percent.

Senator **Kennedy**. Can you give us some idea for the reasons for these decreases?

You cited a decrease in the general cancer mortality rate for women of 8.5 percent, and then you gave the illustrations of specific types that have gone down? Is there any additional information you can provide for us as to why this is taking place?

Mr. **Garfinkel**. As I said, there has been a large decrease in uterine cancer especially for cervical cancer, where we believe control efforts have been helpful. We are also very pleased that stomach cancer has gone down, although the reasons are not clear. And the decreases in these two sites are the major reasons why the total cancer death rate has gone down.

Senator **Kennedy**. Has the death rate for men in with stomach cancer gone down as well?

Mr. **Garfinkel**. It has gone down for men as well.

Senator **Kennedy**. Comparably?

Mr. **Garfinkel**. Yes. There has been about the same percentage decrease for men.

In some of the more backward countries of the world stomach cancer is still high. This is one of the reasons why cancer epidemiologists have postulated that some of the advantages of civilization, of refrigeration to keep foods fresh, and perhaps additives in foods we eat, too, are responsible for the decrease in stomach cancer. The phenomenon of the decrease in cancer seem to be associated with, for want of a better word, civilization, with more modern technology.

Mortality rates for breast cancer, the most common site in women, have fluctuated over the years. But overall, there has been little change in mortality. Incidence rates in breast cancer, especially in younger women, have been increasing over the past few years.

Mortality rates for cancer of the pancreas in women have increased by 27 percent, mostly between 1950 and 1960, but have leveled off since. Ovarian cancer and endometrial cancer also have increased, particularly in the 1970's.

But the largest increase in cancer in women has been for cancer of the lung. The mortality rate increased from 3.9 per 100,000 in 1949-51 period, to 13.1 per 100,000 in 1974-76, an increase of 236 percent. Most of this increase occurred in the past 10 years, and there is no evidence that the rate of increase is slowing down.

We have just completed computing death rates for cancer sites in 1977, adjusted for age, and lung cancer in women now exceeds colon-rectum cancer. Lung cancer, which ranked 8th in 1950 as a cause of cancer in women, has jumped to second place, after breast cancer, in 1977.

Senator **KENNEDY**. Can you give us any idea about the breast cancer increases? Is this true outside the United States as well?

Mr. **GARFINKEL**. There have been slight increases. You see, it's very hard to get incidence data on a nationwide basis. There are some international registry data that can be compared, but even the incidence data we have here are based on National Cancer Institute studies in 11 areas. It is difficult to compare incidence rates from one period of time to another, because different techniques are used, different areas are covered and so forth.

Overall, in other countries, there has been not much change. In Japan, for example, which has had a low mortality rate of breast cancer, they're starting to increase. Their stomach cancer rate is going down, and their breast cancer rate has been increasing. In most of the Western European countries there has been some increase in incidence rates over the years.

Senator **KENNEDY**. Is there any correlation or have you drawn any conclusion about the use of estrogens and breast cancer?

Mr. **GARFINKEL**. Well, you heard in the previous testimony that there have been some studies which have indicated there has been a relationship. But it hasn't yet been reflected in mortality rates. As Dr. Wolfe said, it takes many, many years for some of these effects to become apparent.

Perhaps the increase in incidence rates in younger women is a reflection of the increased use of estrogens or birth control pills. But we don't know yet.

Most epidemiologists agree that the social acceptance of cigarette smoking by young women in the 1930's is now showing the grim results of the damage caused by this habit in the Sixties and Seventies as these women reach cancer ages. Cigarette smoking as a habit in men started much before women, after World War I, and we saw the parallel phenomenon in the enormous increase in male lung cancer rates which accelerated in the 1940's, 1950's and 1960's.

Unfortunately, studies have shown that women are not as able as men to quit smoking, so we may expect the upward trend for lung cancer to continue in women for sometime.

We have done much to control cancer in the United States over the past 30 years, but more can be done to warn women, and particularly women at high risk——

Senator Kennedy. Do you think we should do more to warn women when they are teen-agers about the dangers of smoking? Isn't that about on the top of your list—getting the message across to young women in this country, and trying to stop the explosion of smoking by teen-aged young women. We know of the devastating effect that has had on men over the years in terms of lung cancer rates.

Mr. Garfinkel. I fully agree, Senator. As you know, the American Cancer Society has launched these programs for many, many years, particularly directed at teen-agers. Unfortunately, they haven't been completely successful.

There is evidence from a report of a survey that the Secretary of HEW released recently that there may have been a slight drop in teen-age smoking in recent years. But there is a possibility that these trends are temporary and I would like to see longer term trends.

Senator Kennedy. Is this true about teenage girls?

Mr. Garfinkel. Yes there has been significant decreases in teenage girls, age 12-16. In girls 17 and 18, there was an increase of only 0.3 percent.

There were reports in 1974 of a great increase in smoking among both boys and girls, but the later report in 1979 shows overall decreases in smoking.

Senator Kennedy. If you would excuse me, the subcommittee will recess for about 2 minutes. I'll be right back.

[Whereupon, the subcommittee was in short recess.]

Senator Kennedy. We will come to order.

Please proceed, Mr. Garfinkel.

Mr. Garfinkel. Much has been done to control cancer in the United States over the past 30 years, but more can be done to warn women, particularly women at high risk, to the value of being alert to early warning signals of cancer, and to seek prompt and effective treatment. Recent calculations indicate that 40 percent of all lung cancer in women, and 5 to 10 percent of all cancers in women are attributable to cigarette smoking——

Senator Kennedy. Forty percent of lung cancer and what percent of——

Mr. Garfinkel. Forty percent of all lung cancers and 5 to 1 percent—it was 5 percent for data we had collected sometime ago, but with the increase in smoking, we think it may be now closer to 10 percent, of all cancers in women, are attributable to cigarette smoking.

So we believe that the most valuable cancer control measure would be to accelerate educational programs about the hazards of cigarette smoking and the value of quitting, because when they quit the death rates will go down.

Thank you, Mr. Chairman.

Senator Kennedy. Dr. Murray?

Dr. **Murray**. Mr. Chairman, I am glad to have the opportunity to discuss with you some of the special problems and obstacles faced by one-half of this Nation's population. The special health problems faced by women and how American medicine addresses those problems requires a much longer discussion than my time permits.

The composition of the health industry remains an important cause of the casual and often callous treatment given women. The health industry is the third largest in the country, employing over 4 million workers. Three-fourths of all people employed in health are women. In this highly stratified industry women represent over 97 percent of all registered nurses, approximately 70 percent of trained technicians, and 84 percent of service and ancillary personnel. Less than 10 percent of the Nation's physicians, 3.4 percent of the dentists, and only 11.9 percent of the pharmacists are women. Women are quite firmly kept in "our place", in the lowest paying, most servile roles in the industry.

Minority women are forced to bear the triple burden of discrimination based on sex, class, and race. Black, Chicano, and Puerto Rican women occupy the lowest paying jobs in disproportionate numbers. Blacks comprise only 8 percent of all registered nurses, but make up over one-quarter of the Nation's practical nurses, aides, and orderlies.

The message our society gives to its young women is clear—do not aim high. Minority women are not allowed to aim at all. All efforts designed to break this pattern of discrimination must be encouraged and supported.

I will never be able to forget that my chemistry professor, when approached for a recommendation, stated that while I was an excellent student, he could not recommend me for medical school because "I do not believe women should be doctors". After being accepted to medical school, I was informed by one of the deans that because I was black he did not expect me to ever graduate. The financial aid office informed me they would not be able to meet my financial needs.

You see, there is no category in Federal guidelines for single parents. Day care, food, and clothing, for my young son were not considered legitimate expenses.

So, after being told that women did not belong in medicine, blacks were too dumb to complete their degrees, and that perhaps I should deposit my 2-year-old son in a foster home for the next 8 years, I attended my first lecture.

Similar experiences could be recounted by all of my classmates who were women, or nonwhite. In the fact of such bigotry, the amazing thing is not that women and minorities are so scarce in the medical profession; but that there are any of us at all.

Senator **Kennedy**. How has that attitude changed? I mean, it has clearly changed with regard to your own position, your election as president of the Cook County Housestaff Association. So I gather your colleagues and contemporaries have a great deal of respect for your personal achievements and accomplishments.

How have the attitudes changed?

Dr. **Murray**. The key point is that I wasn't elected by chemistry professors or deans. I was elected by my peers. I think the figures show that for minorities, for admissions, and for women, have been increasing, especially in the seventies. They are not increasing at the rate they ought to be increasing. In fact, for minorities, since 1973, the figures have either gone down or remained the same.

So I think what we have here is, because of great struggles on the part of blacks and other minorities and women's movements, we see some inroads. But the basic pattern and basic deeprooted opinions that these gentlemen expressed are still there. I was in their medical school, and it still has an effect.

Unfortunately, there are many minorities and many women who don't graduate, and perhaps if these attitudes and things weren't so blatently expressed, they would have been able to finish.

The treatment we receive as health workers, women health workers, is kind compared to how we fare as female patients. The effect of institutional racism and, more specifically, the racist character of the health care system on the lives of black, Chicano, and Puerto Rican, and other minority people, is clear; 20 of every 1,000 white women die from complications of childbirth. Nonwhite women are five times more likely to die during childbirth than their white counterparts.

These figures are a national disgrace. It is disgusting that while we celebrate the International Year of the Child, almost 15 infants of every 1,000 white births die; for nonwhites, there are 25 infant deaths per 1,000 live births. These statistics are a sad commentary on the availability of prenatal care. As long as we allow American medicine to run on a fee-for-service basis, working class women and especially women of color will continue to be denied routine but essential services.

Teenage pregnancies represent a category of high risk. In recent years one-fifth of all infants were born to women under 20, and 40 percent of these were born to women under 18 years of age. The birth rates for nonwhite teenagers, while decreasing, is still seven times higher than that of white teenagers. Where are the special funds and programs to meet the needs of these young women.

The Government has made it increasingly difficult——

Senator **Kennedy**. Last year we passed the teenage pregnancy legislation, which is a very, very modest beginning, trying to begin to deal with some of these problems. We finished just yesterday the Conference of the House and Senate on funding for the program. It's a very small amount of funds, but at least it's a beginning. The program was authorized by this committee and I hope it will win wide acceptance and that it will help those young women who, out of choice, desire to have their babies, by providing the kind of treatment beforehand and the followup and well baby care that they want and need.

Dr. **Murray**. I look forward to that, Senator.

Senator **Kennedy**. We'll send you a little package on that.

Dr. **Murray**. The Government has made it increasingly difficult for young women, especially black and brown women, to obtain abortions when they so desire. On the other hand, sterilization procedures have the full financial support of the Government. Public policy on family planning is justly viewed with great suspicion in nonwhite communities. Women are not given the counseling or information necessary to make their own decision about planning their families. Instead, women, especially poor women, are placed on the pill with no discussion of its possible complications, nor of alternative methods of family planning. The disproportionate sterilization of Puerto Rican, Native American, Chicano, and Black women is well documented and can only be described as genocide.

The issues of free and available family planning methods, including abortion and the fight against sterilization abuse, are intimately intertwined and critical to the future of millions of young women. Where is the policy and funds to deal with these problems?

The dangers faced by the millions of working women on their jobs are either ignored or used to justify job discrimination. We are a Nation that tolerates the on-the-job death of 15,000 workers each year, and another 100,000 deaths a year from occupationally-related diseases. Women are a vital part of that endangered work force. The lead industry represents a dangerous example of twisted logic. There have been attempts to bar women from working in lead industries because of the harm to the fetus if they should become pregnant. A number of women have submitted to sterilization in order to keep their jobs. Such logic must be exposed as merely another crude attempt to keep women out of better paying jobs.

As an occupational medicine physician, I wish to compliment the lead industry for its concern about our future generations. I only wish they were as concerned about my adult patients—men and women suffering from chronic lead poisoning. I wonder why they never express worry about the effects of lead on the male sperm.

We cannot tolerate a feeble attempt to protect women being used as a substitute for achieving the goals of OSHA, "to assure as far as possible every working man and woman in the Nation safe and healthful working conditions and preserve our human resources." It will be impossible to address the question of why cancer among blacks is rising without a national program adequately funded to solve the massive problems of occupational and environmental diseases.

The difficulty minority women face getting health care increases with age. Of the almost 2 million blacks who were over 65 in 1970, 60 percent of them lived in the South. Black women over the age of 65 have the lowest income of any of their generation. Black women are more likely to be widows. When we remember that our old people even with medicare spend several hundred dollars a year for out-of-pocket medical expenses, we can understand the plight of poor women.

One of my patients, a 70-year-old woman living alone on social security visited me recently. She was distraught over a $140 balance due after medicare for a hospital bill. This poor woman, a diabetic, took most of her food money to pay that bill. She soon had to be readmitted to the hospital because she was unable to maintain a proper diet.

Another patient with severe arthritis called me up to say she could not keep her clinic appointment. Money for transportation of elderly patients has been slashed, so that dozens of my patients sit at home, out of medicine, risking heart failure or a stroke while they try to find some friend or neighbor to drive them to the clinic.

Thousands of old people, especially poor old people, lose their sight each year because they cannot afford proper medical treatment. The neglect, the wear and tear of decades of untreated hypertension, diabetes, poor nutrition, no dental, hearing, and vision care, take their toll of our senior citizens, shortening their productive lives by decades.

There are live people behind the statistics the Government spits out. In addition to the socioeconomic effect that racism has on peoples lives, American medicine adds its own institutional racism. The life expectancy for nonwhites is 6 years shorter than that of whites. Nonwhites have 50 percent more bed disability days. We are three times more likely to die of hypertension, 60 percent more likely to die of cerebrovascular disease, five times more likely to die of tuberculosis, twice as likely to die from diabetes as our white counterparts.

A gradual phasing in of national health insurance will not even dent these statistics. Catastrophic health plans become a cruel joke when the health status of black, Chicano, Native American, and Puerto Rican peoples is already a national disaster.

I do not believe that any scheme to reduce the financial barriers to health care can solve the problems forced on peoples of color.

If we are to save the lives of young mothers and their infants, we must have a program which is free at the point of service for all.

If we are to stop the needless deaths from neglected disease, we must have a national health service dedicated to preventive medicine.

The only hope for reversing the frightening increase in cancer rates among blacks lies with a national health service capable of safeguarding all of our people from environmental and occupational hazards.

History has shown nonwhites that it is in the public sector that we have the most influence. The health of our people is too important to be left in the hands of a for-profit private system. We must have a national health service operated by and for the American people.

Women cannot expect to take our rightful place in the health industry unless the full weight of Federal Government guarantees vigorous affirmative action programs.

There are fewer black physicians today proportionately than there were in 1920. Any national health plan which does not radically change the numbers of minority health workers in skilled areas is doomed to failure. Every day we delay in joining the rest of the world, another woman dies in childbirth. Every day we allow profits to be made off sick people, another black woman has a stroke.

As I go to work every day and see my people suffer, one thought sticks in my mind—only two nations in the Western World have no national health service, the United States and South Africa. For peoples of color, the similarity is painfully clear.

Thank you.

Senator **Kennedy**. Dr. Briscoe?

Dr. **Briscoe**. Senator Kennedy, I am privileged to bring you greetings from the Association for Women in Science, and I express our deep appreciation for your efforts on our behalf. We thank you for studying our problems and for putting your expert staff to work on them, and for coming up with a terrific proposal, S. 568, which we hope will get women out of the scientific pits.

My remarks today are intended also to galvanize the committee's support for this bill, which is the first constructive plan to give women a chance to play in the scientific major leagues. We are tired of professional segregation.

Included in this agenda is a description of the women's activist caucuses in the sciences, to show what we have tried to do for ourselves. And since this is day-time television, we will have some real life scientific soap operas of victims of discrimination, and illustrate why section 403(a) of the bill is a must.

You will hear a letter read from San Clemente—and it's not what you think. It is from two women scientists—and a paraphrase of a quotation from Shakespeare. All of this is designed to induce you to become members of the Association for Women in Science. And just as you don't have to be an animal to join the ASPCA, you don't have to be either a woman or a scientist to be a member of AWIS, the Association for Women in Science, which we call AWIS—and the second letter is a W.

Now, I am speaking in my various extracurricular roles as president of the AWIS educational foundation, as a commissioner on the New York City Commission on the Status of Women, as treasurer of the Federation of Organizations for Professional Women, and as chairperson of the Women in Science Committee of the New York Academy of Sciences. I am a biochemist at the Columbia University College of Physicians and Surgeons, and I am director of the biochemistry laboratory at one of our teaching hospitals, Harlem Hospital, which is a health care facility for the poor that is very much overworked and underfunded. I came back from vacation on Monday to find that our budget has been cut again. That's about the fourth budget cut this year.

Well, first I thought I would tell you about AWIS, which was founded in a smoke-filled room in the Palmer House in Chicago in 1971 by 40 women who had Ph. D's or M.D.'s or both, who were attending national annual meetings of six biomedical societies which always meet together.

The membership at that time was about 10,000, of whom between 8 and 10 percent were women. There were no women really participating in these societies; that is to say, there were virtually no women who were officers, members of committees, members of the governing councils, and less than 1 percent of the editors of the scientific journals published by these societies were women.

Of course, all these activities are steps toward upward mobility in one's profession. So AWIS was founded to cope with this traditional exclusion of women from full participation in professional societies, and also to address the problem of professional stagnation and oblivion which most women scientists could expect over the years.

Now, how we happened to form this organization was that we had been meeting informally at something called the Women Scientist's Champagne Mixer, the champagne being supplied by some of the companies that sell scientific research equipment. In this way we had gotten to know each other and to get a better picture of the low status, despite high accomplishment, of our sisters in science, because most of us worked as the only woman in some department and were really very isolated from each other until this organization came into being.

What we found was that women who had done a great deal were still in the ranks of the triple A's—the assistants, the associates, and the adjuncts.

And so AWIS was founded "to promote equal opportunities for women to enter the professions and to achieve their career goals". Very shortly thereafter, other activist women's organizations and caucuses were formed, such as the Association for Women in Mathematics, Women in Cell Biology, the Women's Caucus of the American Physical Society, and many others. And now these activist women's caucuses are very much a part of the scientific community.

I reviewed them in an article in the periodical SIGNS in September of 1978, and I am including that review in this report. These caucuses and organizations insure an effective women's presence in the societies, promote affirmative action, increase professional opportunities for women, advise appropriate agencies concerning the pool of women candidates for appointment to public advisory committees, and continually assemble data on the evolving status of women, to state just a few of their functions. Of course, this last thing is just an application of the scientific method to the problems we were facing. First we had to have the data so we could know the magnitude of the problem.

As the leader of these organizations, AWIS set a goal of establishing a computerized registry of women in the sciences, because we wanted to facilitate all those employers who really would like to hire women but can't find them, don't know where they are, don't know where to look for them, and then conclude that there aren't any.

It's a very expensive thing to set up a computerized directory, and no agency, public or private, was willing to fund us, despite the fact that this would be valuable in implementing affirmative action. Parenthetically I might say that women's organizations don't attract the big money. I might say I am here today at my own expense, and was greeted on the plane as it took off with the news that the fare had just gone up.

Anyway, setting up our directory with our limited resources has been slow, but it is proceeding and it is being used. We charge prospective employers for doing research and, of course, women scientists have the use of it at no charge.

Now, in addition to these activities, an educational foundation was established in 1974, under the leadership of Dr. Estelle Ramey of Georgetown University, the purpose being to raise money for graduate scholarships and to sponsor appropriate conferences.

Such a conference was the one called "Expanding the Role of Women in the Sciences," cosponsored by the New York Academy of Sciences and our Educational Foundation in March 1978. The proceedings of that conference have been published as an annal of the academy, volume 323, which is submitted as a part of this statement.

The purpose of the conference was to publicize and record the most recent data on the status of women in the sciences, and I see some of it displayed there, showing the percentages of women in various fields and the percentages of women in the doctoral sciences from 1920 to 1977.

We brought together policymakers from Government, the academic world and industry, to review these data, and to explore strategies to initiate changes in both attitudes and procedures. But to date, there has been no plan with the vision and broad spectrum of programs designed to do this other than that of Senator Kennedy.

Our conference documented the inadequate nature of affirmative action as a remedy for the barriers to full career development of women; not affirmative action per se, but as its requirements are ignored, by-passed, and unenforced. Our speakers provided the data that in academia and the Government, affirmative action has neither diminished sexism nor lowered any standards, nor created reverse discrimination.

Reverse discrimination, you know, is a term that means unexpected stiff competition for white males. [Laughter.]

Even if affirmative action were favorable to reverse discrimination, it has never had wide enough application to make any difference. It is probably not necessary to remind anyone, but for the record, women are admitted to candidacy for their degrees on the basis of at least equal standards to those of their fellow students. Only in industry has there been any increase in employment of women, this being at the entry level. This should be viewed in light of their proportion. Only 1 percent of American engineers are women, so even if the number of women engineers doubles, it is still small.

Senator **Kennedy**. What is the problem in getting more enforcement and more affirmative action in terms of the employment aspects?

Dr. **Briscoe**. The problem is twofold. One, that all of the machinery that has been set up moves far too slowly. For a scientist to be unemployed for any length of time is a loss that cannot be compensated for. You're not in your laboratory, you're not doing experiments, you're not publishing, you're not teaching. You're just losing ground.

It takes too long for the various departments of the Government, which have been mandated to enforce the affirmative action requirements, to get moving, and then they are ineffective. If they do bring a judgment against an institution, very frequently the institution says, "We're not going to do anything". I have some cases to illustrate this to cite if we have time.

It is then necessary for the complainant, the woman, to get a lawyer and bring a lawsuit, and that's not feasible for most women because the cost is prohibitive.

I thought I ought to mention, since we dwell so much on the bad news, that once in a while something good happens. There has been a tremendous increase in the percentage of women on public advisory committees, the committees which give out the research money. The percentage went up from 2.9 in 1971 to 20.5 in 1976. But it didn't happen by accident. There was a lawsuit initiated by AWIS in conjunction with other women's advocacy groups against the Secretary of HEW and the Director of NIH, and that seemed to galvanize them into a little action.

But as Dr. O'Hern of NIH pointed out at our conference, the 30-percent goal that was originally set, that no more men were to be appointed to these committees until they had a membership of 30 percent of women, that goal was never reached. And now there may even be some backsliding.

The continuing discrimination in hiring, salary, and promotion and lack of enforcement is partly the inertia of sexism in our society, partly because discrimination today is more covert. People aren't saying "We don't want minority persons, we don't want a woman." They're saying, "Well, we would like to have you but your qualifications aren't as good."

It is difficult to prove discrimination in a court of law, and one individual pitted against the resources of a great institution has very little chance. That is what brings me to section 403(a) of S. 568, which would, if adopted, provide money for legal costs for women involved in sex discrimination cases.

Senator KENNEDY. Dr. Briscoe, we will include the rest of your statement in the record. I am informed we will probably have some votes at 12:30. So if you would like to summarize, we will include the statement in its entirety in the record.

Dr. BRISCOE. Despite 10 years of affirmative action, women have not made a great deal of progress; in all employment settings, in all fields of science, they are having more difficulty in being hired, promotion is slower, salaries are less than men with the same qualifications. And to quote Bernice Sandler:

> No dollars have ever been withheld under the Executive Order for sex discrimination in institutions * * *. In a few instances the government has delayed federal funds, but not because of sex discrimination. Money has been delayed only when the institution has refused to provide data or failed to be in compliance with some of the procedural requirements of the Executive Order.

So we are looking for the kinds of assistance that the bill you introduced would give us.

Thank you very much.

Senator KENNEDY. Thank you very much for your generous remarks about the legislation.

We will now turn to Ms. Eleanor Smeal, who is president of the National Organization for Women.

Ms. SMEAL. Thank you.

I am pleased to have this opportunity to present our testimony on women in health on behalf of the National Organization for Women, which is the largest feminist organization in the world, composed of 100,000 women and men dedicated to achieving full equality for women.

I first want to congratulate you and the subcommittee for providing this forum for dealing with women in health problems, and I particularly want to congratulate you for your crusade for better health insurance for our Nation, both males and females. We believe that a full comprehensive health insurance program is especially necessary for females who are disproportionately among our Nation's poor.

Our testimony goes into much of what the other testimony went into. It documents discrimination against women in education, in the medical establishment, and it documents the male domination of the decisionmaking realms of the medical establishment, and it goes into the difficulties of females as patients, females as procurers of family health services, and as females involved in research, both as victims of research and, frankly, as being excluded from performing research—again back to this pervasive discrimination against women in the medical industry.

I don't want to go into all that. I feel that the testimony stands on its own merits, and I also feel that your opening statement indicates that you are well aware of the pervasive sex discrimination against females.

I would like to go more to our conclusions. And I would also like to try and put some feeling into the testimony behind statistics. I think that if there is ever going to be a full history of the women's movement in our society, if it's ever going to be documented as to why it occurred at this time, I think you will see in the backgrounds and histories of many of the leaders of the women's movement you will see events in their own medical history of discrimination. You will see also their fighting the industry in trying to provide better care for their children.

As a matter of fact, I don't speak on this subject academically. I spent nearly a year in bed with a back ailment, and I also spent a great deal of time fighting for better health care for my children and for my father. I feel that in my own experiences the subtle putdown and lack of status of females in our society resulted in worse health care, not only for myself but for my children and for my father.

I think it is imperative to see the whole picture of sex discrimination not only in terms of dollars and cents and in terms of lost opportunities, but actually in terms of worse health care, not only for females, but every member of the family. Because often we are the brokers, the negotiators for our children and for our parents or for our husbands in health care, and too often our indications that there's a need for help is ignored because we are cast aside as being overworried, overprotective, and that we simply don't understand. I think there is probably not a female alive that cannot relate instances of just terrible frustration in trying to get a doctor's attention over the needs of health care for her loved ones.

It is in part of that that many of us realize that the elimination of sex stereotyping and discrimination is absolutely essential if this society is really to provide for all in its best sense.

I would like to go to some of our recommendations. We are particularly concerned with trying to help in the area of Federal legislation to solve the problems. We feel that it is possible to alleviate some sex bias in the area of medical professions, that we can create incentives for the participation of women at every level of medicine, and that we can create severe disincentives for experimentation on women in federally funded research.

Most particularly, the Federal Trade Commission has authority over the certification of the medical school accreditation process. Equal opportunity for women must be one of the basic criteria in the accreditation of medical schools. The accreditation criteria should also demand of medical schools some affirmative program to rid the curriculum and services of sex bias materials and attitudes.

When Dr. Briscoe was talking about the difficulty of a woman defending herself in affirmative action, she was about to read about or cite her case about Dr. Sharon Johnson from Pittsburgh, which happens to be my own home town. I happen to have been at that time just a person in the women's rights area, fighting for the rights of one woman. I can testify to the fact that the legal system is not only too slow, that I would probably not recommend a person taking every step into it. As she fights, her own opportunity is whittled away, and we must have preventive legislation that does not place the burden upon each person a fight that for Dr. Johnson lasted nearly 8 years in court

Medical schools must be given incentives to create flexible educational residency programs. Senate bill 568, Women in Science and Technology Equal Opportunity Act, must be passed, and the National Organization for Women stands behind it as strongly as we can.

The equal participation requirements of the health systems agencies program must be enforced. Care must be paid to increasing the numbers and utilization of nurses in innovative delivery of medical services, as well as in highly technical and skilled specialties.

A branch of NOW has been called Nurses NOW, groups of nurses who organized so that their professionalism will be given more respect and their ability to provide better care, and so that a better pay will be realized.

Experimentation on women must be ended. The regulations on experimentation on human subjects must be expanded to target experimentation on women. The abusers must be regulated with Federal criminal penalties for experimentation that knowingly or negligently puts women at risk of pregnancy or of serious illness or injury or death.

Comprehensive national health insurance, which includes complete reproductive health care, is especially necessary for females. As you know, we are among the working poor, making 57 percent of what men make.

I would like to highlight here especially the needs of homemakers, displaced homemakers through death or divorce, separation, who are dependent on husband's health insurance often find themselves without adequate protection. National health insurance which would provide financial incentives for the elimination of unnecessary surgical procedures would be of special value to women who are the most frequent victims of this abusive surgery.

By the way, any kind of medical health insurance must include total protection for females. One of the most outrageous problems in current private health insurance is that frequently it doesn't include what would be most logical in health care. For example, in a mastectomy, reconstructive surgery after a mastectomy is frequently listed as "cosmetic surgery" and therefore not included. It is an atrocious neglect of females.

Federal insurance programs, whether medicaid, medicare, or national health insurance, must cover not only the primary medical procedures required, but also the preventive and recovery medical care that is necessary to restore a person as much as possible to their previous health.

Of course, Federal medical insurance programs could also be used as a method to curb sex-biased treatment. Studies should be made of reimbursements to doctors to establish the incidence of drug treatment prescribed for women in comparison with treatment for men, and to detect the incidence of abuse in hysterectomies, cesareans, and radical mastectomies.

We have a special concern in the area of reproductive health care and research, and have many recommendations in that area. We are appalled at the fact that 55 percent of pregnant women receive no prenatal care in American cities. In fact, we see there is all kinds of irony in the present reproductive health care system situation in which sterilization is frequently prevented from people who want it; yet there is much abuse in the imposition of it on people who neither understand nor do not want it.

An irony of the current reproductive health services problem is in abortion services. Abortion has been shunted to specialized clinics because of governmental decisions making it unavailable at public hospitals and clinics. Some abortion clinics are denied the right to refer patients to public hospitals should complications occur. Government policy would rather see women be maimed, resort to self-induced abortion, or die, than provide them with the necessary services at the time.

All these things have untold fallouts. In my own city, it is very difficult for a rape victim to be treated because of the limitation of abortion services. Some hospitals will not treat a rape victim because the standard procedures after rape involve what some might think are abortion or abort-efficient procedures. It is another part of the pervasive sex discrimination.

In the area of reproductive health care we recommend that we increase funding for contraceptive research with moneys targeted for research on barrier methods. I have heard other testimony today on this, also. And on other nonhormonal methods, as well as some special emphasis on male contraceptives.

We must create tax incentives for drug companies to do research on safe methods of birth control, and to do safety and effectiveness testing on current contraceptives.

We must target research moneys for health problems of pregnancy, especially toxemia and eclampsia. In this area is another type of assumptions of sex stereotyping, where people are told that because they're overweight it causes the condition of toxemia, when in fact we do not know the causes of it.

We must have a Federal mandate of complete private and public health insurance coverage for reproductive health insurance and services, including abortion, sterilization, and reversal of sterilization, genetic counseling and treatment, and infertility treatment. As a matter of fact, the National Organization for Women in September is going to announce comprehensive reproductive health care legislation which we hope will begin a positive examination into this entire area, not from an attack on one method or another, but for a comprehensive approach so that every citizen in our country can have access to total reproductive health care.

Some women face special health problems, and the elderly, the minorities and the handicapped have been mentioned. In each of these instances the double discrimination of females against females and against the particular forms of discrimination involving handicapped, minority, and poor aggravates and intensifies the situation.

In summary, the conclusion that we must draw—and our analysis, of course, is not exhaustive—is that sex discrimination can be, in fact, effected by Federal legislation. We know that attitudes take centuries to change. But one of the best ways for those attitudes to change is by attacking them at their core. The status of women must change in the health industry. If all people, females and their families, are to be provided better health care, we know that some specific, pinpointed legislation, targeted legislation, as well as comprehensive health legislation in dealing also with reproductive health care can alleviate the problem.

We live in the richest nation, but there are many gaps in the present health care, and too frequently females are in those many gaps. Women too frequently do not have adequate protection because of inadequate income, because of low status as patients, as workers, and as the interface between the family and the health care system.

Senator **Kennedy**. OK. We'll have all the statements in their entirety included in the record.

I would like to, if I could, try and sum up what we have heard this morning, and get your reaction to it.

First, from our first panel of consumers, we heard about what happens when women are separated or divorced, the enormous problems they have in retaining health insurance, or reestablishing health insurance, or purchasing health insurance on their own. Virtually without exception, in the divorce proceedings, the husband continues to be covered but the woman is left out in the cold. Any insurance they can get is going to exclude preexisting conditions. They are victimized and their children are victimized in many instances. We heard in very moving terms, the fears that young married people, widows, and women who are separated or divorced have about this particular problem.

We heard testimony about how women's complaints to the medical profession are not taken seriously as are men's complaints, whether they are describing their own condition, a child who is sick, or medical problems of other family members. This has been the pattern and the practice over along period of years.

We have heard how women are subject to significant over-prescription of drugs in our society. It may very well be true in terms of medical procedures, as well. We have heard in other hearings, about unnecessary hysterectomies and other medical procedures. But certainly women are at risk with regard to prescription drugs. Some of these drugs are extremely dangerous and nonetheless they are routinely prescribed to women and there is still a significant utilization, probably a vast overutilization in spite of some modifications in the past.

We heard important testimony during the course of the last panel from Dr. Murray, who spoke very eloquently before our subcommittee in Chicago and gave testimony again today about the problem women have in joining the medical profession, particularly if they're members of minorities, and that this is a long-standing problem which continues today.

Then we have the figures and statistics here in the charts which are flagrant in terms of their message. They show that when you're talking about men and women who have been trained in science in similar ways, with equal degrees and equal training, equal background, the rates of unemployment are much higher for women than for men; the salary rates which are dramatically lower for women.

My question to the panel is: What is going to bring about a change and how can we get recognition of these problems? How do you best think we can come to grips with them? I would be interested in any of your reactions.

Ms. **Smeal**. That's why there's a women's movement. We are dedicated to fighting that.

As a matter of fact, our first stage was getting people to recognize the problem. I can remember when we took——

Senator **Kennedy**. You have 100,000 members. The National Rifle Association makes this body jump, like that. They have succeeded in taking away from Consumer Product Safety Commission the ability to label .22 rimfire ammunition. That passed overwhelmingly. There were only 10 or 12 votes supporting the authority and power of the Consumer Product Safety Commission in this area.

You have an active organization, and there are others, and you make up a majority of the country. When are we going to get some action and get the Congress jumping?

Ms. **Smeal**. We're sure going to try real hard to make it sooner.

One of the things that is occurring, in fact—and I think you saw a little better mobilization of us with the ERA extension—is that we, with less funding perhaps than any other major civil rights movement in the history of this country, we have learned how to do it with half as much, and I think with much greater obstacles.

Because what we're talking about here goes to the core of the health care delivery system, every level of it. There are a great many people who gain from the discrimination as it is now. One of the things I found out is that those things that should change most logically are the most difficult to change—and let me give you an example.

You notice how few dentists there are who are female? It's something like 3 percent today. Why? We have small hands; you can make appointments; it's flexible for your schedule. There are 9 million reasons. I would much rather have a small hand in my mouth than a large football hand in my mouth. [Laughter.]

But why? I believe the reason is we are far more threatening. I think we would probably take over that profession if allowed to, much as we have in Scandinavia.

The same thing with obstetricians and gynecologists. Why are there so few women in this field? It is because they are in such demand. I think they're not just competitive. They are more than competitive with their male counterparts, and I think that's the reason why discrimination against them has been so pervasive in that field.

So it doesn't succumb to logic itself. It will only change when people realize it's a political fight, that in fact it does deal with power relationships. We have realized that and we are prepared to spend everything we have to change it.

Dr. **Murray**. I wanted to make a comment.

I think the question you're asking is an important question. I think those sections of society that are oppressed, that face these problems of discrimination in whatever area, have, in fact, the fewest resources to fight that oppression.

But I think we are seeing, certainly in this century, that people who are oppressed in this country fight, and they fight very hard and fight all the time.

Certainly what I hear in Chicago is that large numbers of people, not only blacks and minorities and women, are very upset about the health system—in fact, I think the majority of the American people would support a radical change. I think what we are lacking, which I hesitate to say in this city because it's always said, that what we are lacking is some leadership and some direction to that anger.

I certainly feel that as people get angry, leaders are forced to the forefront. I think that will happen in this area as well.

Senator **Kennedy**. Dr. Briscoe, would you like to make any comment on that? I think we've had two excellent statements. I realize there is no easy or one answer to it.

Dr. **Briscoe**. Well, opportunities in medical and scientific research are controlled by men. For instance, there are two prestigious societies whose members include all the heads of departments in biomedical research and all the present and future heads of all the biomedical research institutes in the country. These societies are the Association of American Physicians and the American Society for Clinical Investigation. Election to membership is an important career step. This year, each of these societies found only one woman worthy of election to membership in all of the United States, and one of these women is Dr. Yalow, the Nobel Prize winner. In contrast, the men who were elected—about 200—are all at a much earlier career stage. This illustrates the unfair disadvantage women face in career advancement.

[The prepared statement and additional information supplied by Dr. Briscoe follows:]

August 1, 1979

Testimony presented to the U.S. Senate Sub-Committee on Health and Scientific Research by Anne M. Briscoe, Ph.D.

It is a privilege for me to have the opportunity to address the Sub-Committee on Health and Scientific Research. Coming from a card-carrying feminist, that translates as follows: It is great to have members of the Senate Men's Club as a captive audience. I am also privileged to bring greetings to Senator Kennedy from the Association for Women in Science and our deep appreciation of his efforts on our behalf. Thank you for studying our problems and for putting your expert staff to work on them and for coming up with a terrific proposal, S-568, to get women out of the scientific cellar or pits.

My remarks today are intended to galvanize your support for the first constructive plan to give women a chance to play in the scientific major leagues. We are tired of professional segregation. Included in this agenda is a description of the women's activist caucuses in the sciences and what we have done to rty to help ourselves. Since this is day-time television, we will have some real life scientific soap operas of victims of sex discrimination and why section 403 (a) of the bill is a must. You will hear a letter read from San Clemente and a paraphrase of a quotation from Shakespeare. All of this is designed to induce you to become members of the Association for Women in Science. Just as you do not have to be an animal to join the A.S.P.C.A., you do not have to be either a woman or a scientist to be a member of A.W.I.S. or AWIS as we call it.

I am speaking today in my extracurricular roles as President of the Association for Women in Science Educational Foundation, as a Commissioner on the New York City Commission on the Status of Women, and as Chairperson of the Women in Science Committee of the New York Academy of Sciences. I am a biochemist at the Columbia University College of Physicians and Surgeons with the academic rank of Assistant Professor of Medicine, and I am Director of the Biochemistry Laboratory at Harlem Hospital Center which is a teaching hsopital of the medical school.

First I would like to tell you about AWIS. It was founded in 1971 by 40 women scientists who were attending the annual national meetings of the six largest biomedical societies. They meet together every year and are called the Federation of American Societies for Experimental Biology. In 1971, there was a total combined membership of 10,000, of whom 8 to 10% were women. However, there were no women who served as officers or members of governing councils or on committees of the societies, and less than 1% of the editors of the scientific journals published by the societies were women. AWIS was founded to cope with this traditional exclusion of women from full participation in professional societies and also to address the problem of professional stagnation and oblivion which women scientists could expect over the years. We had been meeting informally for

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the previous six years under the leadership of Dr. Virginia Upton, now of Wyeth International, at something called the Women Scientists Champagne Mixer, the hospitality being provided by companies which sell research equipment, and we had become aware of the generally low status and high accomplishment of our sisters in science. We were, as has been said, the triple A's: assistants, associates and adjuncts. And so on April 13, 1971, in a smoke-filled room of the Palmer House, AWIS was born with the purpose of "promoting equal opportunities for women to enter the professions and to achieve their career goals". Very shortly thereafter, other activist women's organizations and caucuses were formed such as the Association for Women in Mathematics, Women in Cell Biology, the Women's Caucus of the American Physical Society, and many others. Activist women's caucuses in scientific organizations are now part of the scientific community. My review of them, published in September, 1978, in the periodical, SIGNS, is included in this report. They insure an effective women's presence in the societies, promote affirmative action, increase professional opportunities for women, advise appropriate agencies concerning the pool of women candidates for appointment to public advisory committees and assemble data on the evolving status of women, to state just a few of their functions.

AWIS, as the leader, set the goal of establishing a computerized registry of women in science/ in the U.S. and Canada to facilitate all those employers who want to hire women but who cannot find them, do not know where to look for them and conclude that there arenot any. It costs at least $10.00 per name for this registry and no agency, public or private, was willing to fund it despite its value in implementing affirmative action. Setting it up and maintaining it has been limited by our resources, but the process is going on slowly. AWIS also publishes a bimonthly newsletter with news of research grants, accomplishments of members, and employment opportunities.

AWIS also sends a triweekly job bulletin on request. A copy of these publications is included with this report.

Now in addtion to these activities, the AWIS Educational Foundation was established in 1974 under the leadership of Dr. Estelle Ramey of Georgetown University, to raise money for graduate scholarships and to sponsor appropriate conferences. Such a conference was the one called "Expanding the Role of Women in the Sciences", co-sponsored by the New York Academy of Sciences and the AWIS Educational Foundation and held from March 6th to 8th, 1978. The proceedings of that conference have been published as an Annal of the Academy, volume 323, and this is submitted as a part of this statement.

The purpose of the conference was to present, publicize and record the most recent data on the status of women in the sciences, to bring together some of the policy-makers in government, academia and industry to review these data; and to explore strategies to initiate changes in both attitudes and procedures. To date, there has been no plan with the vision and broad spectrum of programs designed to do this other than that of Senator Kennedy. Our conference documented the inadequate nature of affirmative action as a remedy for the barriers to full career development of women; not affirmative action per se, but as its requirements are ignored, by-passed and unenforced. Our speakers provided the data that in academia and the government, affirmative action has neither diminished sexism nor lowered any standards nor created reverse discrimination. Even if it were inherently favorable to the latter, it has not had wide enough application to make any difference. Reverse discrimination is a term used sometimes to mean unexpected, stiff competition for white males. There is no need to remind ourselves that women are not admitted to candidacy for their degrees on the basis of lower standards than those of their fellow students. Only in industry has there been any increase in employment of women, this being at the entry level. This should be viewed in light of their proportion: only 1% of American engineers are women; until recently only 4% of geophysicists were women. There is a great increase in women students in fields such as dentistry, veterinary medicine, medicine, physics, engineering and so forth. But the percentages are still far too low. In terms of utilization of our human resources, we are still wasting nearly half of our potential scientific talent at a time when this country needs the most it can nuture. After a decade of affirmative action, women can expect lower salaries, slower promotions, lower ranks, greater unemployment in all fields of science, in every segment of the U.S. and in any employment setting, public or private, academic, industrial or governmental.

Affirmative action if enforced might be of some help, but as the president of an ivy league university said, affirmative action does not create new jobs. There has to be an infusion of money into the universities as well as strict enforcement of affirmative action requirements. Otherwise, with diminished enrollments and budgets, there is little support for new faculty, and the appointments that arise are not likely to be given to women. Just one example will illustrate the point: Dr. Nixon reported at the conference that in departments of chemistry that grant Ph.D. degrees, only 2% of the fulltime faculty are women. At the same time, these departments last year granted 10.4% of Ph.D.'s in chemistry to women. They educate us and then refuse to hire us.

The improvement in the status of women aside from increased admission to professional schools mentioned above is in the realm of appointment to consultant positions: the percent of women on public advisory committees increased from 2.9% in 1971 to 20.5% in 1976. The explanation for this spectacular change lies in a law suit initiated by AWIS and several other women's advocacy groups against the secretary of HEW and the director of NIH. As Dr. O'Hern of NIH reported at our conference: "Still short of the 30 percent goal once sought, the proportion of women in the last year shows a slight decrease ... Women's salaries ...still lag somewhat behind those of men, few women are found in top decision-making positions, and fewer still receive the accolades, honors, and awards of any kind."

The reasons for the continuing evidence of sex discrimination in hiring, salary and promotion are several: the inertia of institutional sexism, the fact tha although it is illegal, it is covert and difficult to prove in a court of law and far too costly for an individual pitted against the resources of an institution. That brings us to Section 403 (a) of S-568. Two speakers at the Conference addressed the question of redress of grievances. Dr. Alan Nixon, former President of the American Chemical Society, described the case of Dr. Sharon Johnson formerly of the University of Pittsburgh. A biochemist, she was refused promotion and dismissed without an outside evaluation of her work or even notificati of the meeting at which this was decided. A temporary injunction was obtained, a landmark in itself, and she continued to teach and conduct research for 5 years while the case was in the courts. Her research /was generously supported by NIH, a measure of her standing among her peers. Ultimately she lost the case. In the PITT NEWS of September 14, 1977, were "the details of an unpublicized pact that was entered into between the University of Pittsburgh and Sharon Johnson. This is the outcome of the five year legal battle stemming from the sex discrimination charge by Dr. Johnson against the University. The judge in the case, although admitting that the University had engaged in sex discrimination, says he could not find that it had in this particular case.....The pact required a promise from Johnson not to appeal the case (to the Supreme Court) in return for the University agreeing not to sue her for the $300,000+ court costs and permitting her to continue her research" for a few months being supported by her NIH grant. Although Dr. Johnson could have had a distinguished career as a scientist, she has recently accepted an administrative position here in Washington. Another case mentioned by Dr. Nixon is one with which I am familiar because the complainant has been in contact with AWIS for moral and financial aid. Unfortunately, AWIS has no resources of this magnitude. I might say parenthetically that I am here today at my own expense. Dr. Molly Gleiser, a physical chemist now 53 years of age, was"phased out of her job at the University of California Berkeley Radiation Laboratory because of lack of funds" in 1971. She was discriminated against in rehiring and has supported herself by writing articles, working as a crossing guard and so forth. In June of 1975, four years later, that laboratory was found guilty of violating Title VII. As of the winter of 1978, Dr. Gleiser had neither been rehired nor offered a monetary settlement. At that time she was seeking funds o obtain a settlement.

Next, I would like to read you a letter I received this month from San Clemente, California over the signatures of Dr. Karen McNally and Denise D. Pieratti. "We are writing to you on behalf of Dr. Judith Moody, an assistant professor of geology at the University of NOrth Carolina-Chapel Hill. After Dr. Moody was denied tenure by the department, she appealed her case to the University Faculty Hearing Committee. The substance of her appeal was based on sex discrimination. In spite of conflicting evidence and substantive support of Dr. Moody by witnesses, letters of recommendation and her professional record, the departmental decision was upheld by the Hearing Committee. The legal fees for the hearing were in excess of $3400.00 Many of Dr. Moody's students and colleagues are donating to a legal fund but our private resources are minimal compared to the cost of further hearings and appeals. Are funds available through the Association for Women in Science to support a legal fund for cases dealing with sex discrimination of women professionals? It is apparent that cases like this one are becoming more common; perhaps by a concerted effort to challenge the question of tenure and promotion decisions, we can all improve the working situation ...of all women professionals." I receive a letter or a phone call every week requesting both advice and financial aid, as an officer of AWIS. I have complete records of about 50 cases from women all over the country who are or have been involved in grievance procedures within the government, universities or the private sector due to sex discrimination. I cannot investigate each in great detail, but I believe that most of them are truly victims of institutionalized sexism. There is a pattern of similarity of circumstances that I am hearing that these women, isolated from each other, could not have invented; there is a ring of truth, and this is backed by the overall data on employment statistics which adds credibility to their claims. Most of these women lack the funds to cross swords in a legal battle with a large company or a great university. In the government also, procedures move too slowly and arbitrarily to insure justice.

Drs. Helen and Robert Davies of the University of Pennsylvania and members of their Trustees Committee for Affirmative Action, described the tactics used by universities in litigation involving sex discrimination. A popular publication among administrators is that of Stitt and Limitone in the Journal of College and University Law, in 1973. The article does not advise searching for truth and justice which one expects of an institution of learning. It describes how to stall for time, time being on the side of the defendant; And " it is clear that one of their important defenses is to demonstrate that universities are unique institutions and that complaints against them should be handled differently from the way complaints are handled against business corporations. The discuss ways to prvent the complainant from using a hearing for discovery of necessary data required by the complainant."

Again from the Conference, it is relevant here to quote from Dr. Bernice Sandler: NO DOLLARS HAVE EVER BEEN WITHHELD UNDER THE EXECUTIVE ORDER FOR SEX DISCRIMINATION IN INSTITUTIONS....IN A FEW INSTANCES, the government has DELAYED FEDERAL FUNDS going to institutions but NOT because of sex discrimination. Money has been delayed only when the institution has refused to provide data or someh was not in compliance with the PROCEDURAL requirements of the Executive order."

Many of us are now doing on a small scale some of what S-568 would greatly expand: we are going to high schools and colleges and attempting to interest young girls in careers in the sciences. I sometimes encounter gifted students who say they are looking for fields in which there are rewarding positions for women. They ask whether on that basis, I would recommend a science. If we provide equal opportunity and fair competition as women had during World War II, girls would opt for science and for research in energy, defense or national security just as their fellow students do. Women do not lack ability, only the Y chromosome--ours are double X's. The fault, dear Portia, is not in our stars but in our genes that they are homogeneous.

Thank you for your courteous attention.

The scenario goes like this:

Case 1.

The characters are a man who is an MD with a tenured position in a clinical department, and a woman who is not tenured who is a Ph.D. in that department. He suggests that they apply for a research grant, and they prepare an application together, poolong their ideas. It is submitted to NIAID, in 1978. He is named principal investigator and she is called co-principal investigator. In the late spring or early summer, they are notified that the grant has been funded. At that point she is recuperating from a hysterectomy. He fires her, saying that she is not really a good scientist. She remained at the institution this year because they are required to give her a year's notice that she is not reappointed, but she has been cut off from the project and the money. Now it is my contention that this grant and many others like it were awarded on the basis of the qualifications of more than one person; that one cannot make a judgement as to how much credit each one deserves for the original application, and that if the principal investigator wants to break the partnership, NIH should establish a community property rule: split the grant 50-50 or in some proportion related to the number of investigators who wrote the grant application. To put all the power in the hands of the so-called principal investigator is a concept similar to primo-geniture ro analogous to the old-fashioned power of the pater familias.

Case 2. A Pharmacologist in a state university medical school in the south She is 49 years old, has spent ten years there and was made a full professor three years ago. Has tenure. She writes: I have moved to quarters one third the of what I had before; my lab is inoperative at present because the new office has no shelves and half the lab is housing office materials. My work requires a hood and although I was told I would have one, none has been installed yet. My teaching duties in the medical school are being diminished under the guise of reorganization. Essentially I have been removed from any decision-making role and my ability to promote research has been severely damaged. A newly hired instructor has more space than I. This has all happened since the appointment of a new chairman.

Case of Dr. S.G., a biologist at a state university in the middle-west. Her case was joined with that of an English professor. Dr. S.G. came there with her husband, Dr. A.G. OCR judged their qualifications to be the same at that time. He was made an assistant prof. and is now a full professor. She was a part-time instructor, then temporary, part-time associate Prof. Through manipulation of her research/course load, her total earnings were $3600, in AY 73-74. She complained to the university grievance committee that she was being discriminated against and was fired. She saw an announcement of a fulltime position and applied for it. Two men were hired who did not have Ph.D.'s. They did the work

[illegible]

against and that the university as not in compliance with Exec. Order 11246 as amended and Title IX of the Educational Amendments Act of '72. THey were told to conciliate or file an appeal within 30 days. A similar judgement was made for the English prof.. The university offered each of them $11,000 in return for which they were to drop all further charges and agree never to apply for another job at the unviersity. They refused. Was any money withheld from the university? No. In order to gain the rights they should have under the law, they have had to go to court. Dr. S.G. wrote to me about getting financial help. But AWIS has no money.

Case 4. A young geologist with a substantial publication list and several successive gratns from NSF, has been denied tenure by a large southern state university. She writes:

> At the moment I am following the internal university appeal procedure and am only at the second level (ie Dean's office). It will be another month or two before writing a letter to the Chancellor of this institution might help. I don't know if I will receive any kind of redress within the university or not. I have hired a lawyer and we do plan on filing with EEOC and HEW if my case goes to the 3rd level of appeal (Faculty Hearing Committee). Part of the problem is that about 20-30 positions in 1974 were given to UNC-CH as affirmative action positions by the NC legislator. In my department they have already fired one woman who was hired at the same time I was (1974) and have replaced her with a white male. Now they are trying to do the same with me. Within the university there are several other women in various stages of appeal.

Case 5. this concerns an MD, a young woman who would like to be a surgeon, one of the more inhospitable fields for women. Dr. X. was in her third year of residency this year at the same institution as the woman in the first case who was excluded from the grant. In this case, one of the senior surgeons accused her of performing an operation without permission. She was not at the department meeting wherethis public accusation was made. She produced proof that in fact she had permission but he refused to withdraw the statement and she is suing him for libel. The result is that he gave her a very poor recommendation for a fellowship in cancer surgery at another institution. She had been quite sure of getting the fellowship because she had done research at that institution before going into the surgical residency. But the chief of that branch is new and did not know her personnally. She asked me to write to him and this is his reply:

> I came to New York from a program at where we have two women in our general surgery program. Here at Center of twelve surgical fellows, one is a woman. Other attributes being equal we have given preference to women.
>
> Dr. is one of approximately 60 applicants for 6 fellowship positions beginning July 1979. She is the only woman applicant Of the 60 applicants we regarded approximately 25 as acceptable candidates and sought all 25 for completion of interviews with several of our faculty Dr. was ranked among the top 25.
>
> In our interviews our applicants are assessed and ranked for a variet of scientific, cognitive and personal attributes. Dr. ranked well but came nowhere near the top 6 whom we selected. The allegations about previous performance in another hospital were not relevant to our decisio

Perhaps she was not as well qualified as the 6 who were selected. However, she is attractive, and has a forceful, dynamic personality. Perhaps she is just not fit into his preconceived idea of a woman surgeon. She has been given a very good appointment at an equally outstanding institution in another city but it was not her first choice. There is no case for us to pursue ~~really~~ because if there was sex discrimination, it would not be possible to prove.

Case 6. A Ph.D. in pure mathematics has been given notice of termination of appointment by the president of a state university in the south. She was promoted to associate professor but for what he called "sound program reasons" is being let go. He says he wants someone in applied math. She has been offered a temporary position at another southern state university of somewhat higher standing but it necessitates a move. And at her age, 55, to have to wait another 5 years before being considered for tenure seems a hardship. Also the salary is lower. But my advice is that here too there is no case here for a contest. I had a similar case last year, but in that case, the woman was a statistician and the president of that institution said they needed a pure mathematician. No exchange between the two women was possible because of the time interval of a year between the two.

Case 7. This case concerns a Ph.D. chemist aged 53. She worked in a cancer research [illegible] laboratory of a state university in the far west for 20 years. In 71, she was one of only two women chemists there. Her job was "phased out" and she was repeatedly discriminated against in the matter of rehire. The ACS gave her $3000 to fight the case because after the EEOC ordered the university to negotiate, they refused. The only recourse is a court case. But she cannot afford it.. ... Another chemist who has a batchelor's degree and was a classmate of mine recently contacted me about her suit against a chemical company in New Jersey. She married and raised a family after college and went back to work about 15 years ago. The company fired her when she complained that she was continually passed over for promotion. Her lawyer wanted information about how many women chemists there are available in the area and I have supplied that information as far as we can determine from a group called the New Jersey women chemists, a branch of the local section fo the ACS.

Case 8. A psychologist on the faculty of the women's college which is part of a private univeristy in the east. Her reserach is judged to be very good by her peers but it is not popular with the psych dept of the men's college becasue it deals with the psychology of the menopause. They do not consider this an area for serious research. The system of the univ. is that the woman's college can recommend promotion to tenure but the final decision is in the hands of the mens' branch. They refused despite strong support from her department and the ~~head~~ pres. of her ~~branch of the~~ college ~~university~~. She is now being appointed, after a year's hiatus when she worked for a semi-professional magazine, and continued her research as she still had her grant (the college kept her as a research associate)--to a high level position at the City Univeristy. But not all these stories have a happy ending.

Case 9. A woman with a Ph.D. from [illegible] a mid-western univeristy, who emigrated from Indo-China, was employed at a USDA Nutrition laboratory in the far west. Her chief took advantage of her lack of sophistocation in the ways of the US, and duped her into going off the federal payroll and onto some university grant to facilitate his hriing of someone else. She trusted him and did not realize that what he did was a disadvantage to her. She protested when she discovered that he had misled her, and he fired her. The machinery of the government grievance procedures is very slow. She seemed stale-mated because her husband, also an immigrant, was afraid to leave his tenured position at the state university and there was no position for her within hundreds of miles. In the end, she went away and did an MD in one of those rapid programs for people who have a Ph.D. She is still pursuing her grievance as she is still very angry but I cannot predict the outcome. Meanwhile she ahs finished an internship and is doing a residency.

These cases in which women are forced to go to court would be greatly helped by passage of S568

Excerpt from letter (self-explanatory)

> Last September, I received a letter from the Office of Civil Rights, HEW, stating they found evidence supporting my complaint against IIT. They informed me in November that the Dep't. of Labor was taking over enforcement functions and would proceed with negotiations with IIT. I had requested reinstatement with promotion and tenure, and back pay (I understand this would consist of any difference between what I might reasonably have expected as salary from IIT and my actual earned income since May 1977; this would be a negligible amount, primarily fringe benefits). As I mentioned to you, I now have an appointment as Associate Prof. in the Rehabilitation Institute at [redacted] (a one-year contract, presumably renewable for four more years until consideration for tenure is mandatory). I hope all goes well at CIU, but I do not intend to drop my complaint against IIT.
>
> I hope I have provided the information you wanted. I do appreciate your interest very much.

SIGNS

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REVISIONS/REPORTS

Phenomenon of the Seventies: The Women's Caucuses

Anne M. Briscoe

Though whatever may be written now concerning women's caucuses will be out of date by the time of publication, it is still useful to mention their origins, evolution, and mission. Before there were women's caucuses, there were scientific societies. As in Europe, the learned scientific societies in the United States began as fraternities of men in a particular discipline, who joined them to present their discoveries and data to their peers, to mingle in a special world, and to acquire reputation and prestige. As women entered the scientific professions, a few were elected to membership, but they remained outside the inner echelons of the executive councils, standing committees, and editorial boards of the societies.

The activist women's caucuses emerged in the seventies as an outgrowth of the women's movement of the sixties (see table 1). One might argue that the women's caucus predated the seventies, because the American Chemical Society has had a Women Chemists Committee for just over fifty years. However, before the seventies, this committee did not resemble a women's advocacy caucus in the modern feminist sense but described itself as a women's service committee, with limited objectives largely determined by the parent organization. Similarly, the Society of Women Engineers (1950) and the Society of Women Geographers (1925) brought women scientists together but did not address the problems causing their isolation.

One of the first of the scientific women's activist organizations was the Association for Women in Science (AWIS). From the start, it de-

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clared itself a separate organization, not an affiliate of the Federation of American Societies for Experimental Biology (FASEB) from which it was derived. The FASEB had a female membership of about 10 percent, but almost no women officers, committee or governing council members, or editors of official journals. In addition to their low status within their societies, the women members of FASEB were largely underranked and professionally isolated within their institutions. It took both the work of several leaders and six years of gatherings of women scientists at the annual FASEB meetings, beginning in 1966, for AWIS to be formally organized in April 1971. From its origin as a caucus of biomedical scientists, AWIS then expanded to include all scientific disciplines. In fields other than the biomedical sciences, women reached the critical point to form such caucuses at the same time as, but independently of, AWIS. The precipitating circumstances were the same. Unfortunately, many caucuses have neither the financial support nor the numbers to implement more than a few of their objectives (see the Appendix for a summary of their collective goals). Below are more details concerning various caucuses.

Chemistry

Three caucuses of women chemists are associated with the American Chemical Society (ACS), the American Institute of Chemists (AIC), and the American Society of Biological Chemists (ASBC), respectively. The oldest of these, the Women Chemists Committee of the ACS, was founded in 1927. After Francis P. Garvan endowed a medal to be given by the ACS to recognize the achievements of women chemists, the committee's major task each year has been to canvass the membership for candidates for the award. The committee is now soliciting funds to increase the Garvan Medal endowment, at the same time that the question of the desirability of continuing it has been raised. The committee has recently collected data concerning the status of women in the profession. The Professional Opportunities for Women Committee of the AIC serves as a source of employment information and evaluates the economic status of women chemists. The Committee on Women in Biochemistry, a caucus of the ASBC, is compiling a roster of women and minority persons in the biomedical sciences and provides child-care facilities during national meetings. The AWIS has a more comprehensive registry, including all fields.

Mathematical Sciences

The Association for Women in Mathematics, founded in 1971 at a national meeting of the American Mathematical Association, was in-

Table 1

Caucuses of Women in the Sciences

Name and Date Established	Scientific Society	Source of Information
Committee on the Status of Women in Physics (1971)	American Physical Society	Vera Kistiakowsky, M.I.T., Cambridge, Massachusetts 02139
Caucus of Women Biophysicists and Committee on Professional Opportunities for Women (1972)	Biophysical Society	Rita Guttman, 75 Henry Street, Brooklyn, New York 11201
Committee on Professional Opportunities for Women (1972)	Institute for Electrical and Electronic Engineers	Thelma Estrin, University of California, Brain Research Institute, Los Angeles, California 90024
Women Geoscientists Committee (1973)	American Geological Institute	Mary Hileman, Texaco, Inc., Box 3109, Midland, Texas 79702
Women's Caucus of the Endocrine Society (1976)	Endocrine Society	Anne C. Carter, Downstate Medical Center, Brooklyn, New York 11203
Committee on the Status of Women Microbiologists (1970)	American Society for Microbiology	Elizabeth M. O'Hern, 633 G. Street, Washington, D.C. 20024
Women in Cell Biology (1971)	American Society for Cell Biology	Susan Goldhor, Hampshire College Amherst, Massachusetts 01002
Women Chemists Committee (1927)	American Chemical Society	Nina Roscher, c/o ACS, 1155 Sixteenth Street, N.W., Washington, D.C. 20036
Professional Opportunities for Women Committee (1975)	American Institute of Chemists	Helene N. Guttman, c/o AIC, 7315 Wisconsin Avenue, Washington, D.C. 20014
Committee on Women in Biochemistry (1972)	American Society of Biological Chemists	Ann E. Kaplan, National Cancer Institute NIH, Bethesda, Maryland 20014
Committee for Women in Statistics (1970)	American Statistical Association	Barbara A. Bailar, 468 N Street, S.W., Washington, D.C. 20024

Table 1 (*Continued*)

Name and Date Established	Scientific Society	Source of Information
Women's Caucus (1971)	American Association for the Advancement of Science	Dawn Dressler, Box 751, Portland State University, Portland, Oregon 97207
Task Force on Women in Physiology (1973)	American Physiological Society	N. Elizabeth Tidball, Department of Physiology, George Washington University, 2300 I Street, N.W., Washington, D.C. 20037
Association for Women in Mathematics (1971)	None	Lenore Blum, Mills College, Oakland, California 94613
Caucus for Women in Statistics (1970)	None	Janet Norwood, Assistant Commissioner of Labor Statistics, U.S. Dept. of Labor, Washington, D.C. 20216
Women in Science and Engineering (1971)	None	Margaret E. Law, 80 Richmond Road, Belmont, Massachusetts 02178
Society of Women Engineers (1950)	None	c/o Headquarters Office, United Engineering Center, 345 East 47th Street, New York, New York 10017
Society of Women Geographers (1925)	None	Betty Didcoct, 1619 New Hampshire Avenue, N.W., Washington, D.C. 20009
Federation of Organizations for Professional Women (1972)	None	Marie Cassidy, c/o FOPW, 2000 P Street, N.W., Washington, D.C. 20036
Association for Women in Science (1971)	None	Judith A. Ramaley, c/o AWIS, Suite 1122, 1346 Connecticut Avenue, N.W., Washington, D.C. 20036
Women in Science Committee (1975)	New York Academy of Sciences	Anne Briscoe, Harlem Hospital Center, New York, New York 10037

SOURCES.—Personal communications and Jamie Segal, ed., *Affiliate Handbook of the Federation of Organizations for Professional Women* (Washington, D.C.: Federation of Organizations for Professional Women, 1977).

corporated as a separate, nonprofit educational institution in 1973. With a membership of over 1,000 women, it awards fellowships, compiles employment statistics, provides visiting women lecturers, and publishes employment information. The Caucus for Women in Statistics, a large group supported by dues, is also independent of its professional society. Publishing a quarterly newsletter, it provides job information and is planning a survey of the employment status of women statisticians. The Committee for Women in Statistics, authorized but not funded by the American Statistical Association, is concerned with women's interests within the association.

Biological Sciences

The American Society of Cell Biologists, the American Society of Microbiologists, the Biophysical Society, the American Physiological Society, and the Endocrine Society are among the professional societies in the biological sciences which have women's caucuses. They have been able to increase the number of women elected to membership and to improve their status within the societies. Women in Cell Biology, the caucus of the American Society for Cell Biology, has published a low-cost, outstanding newsletter.

Physics, Engineering, and Geosciences

A public statement demeaning women in physics provoked Vera Kistiakowsky of the Massachusetts Institute of Technology to form the Committee on Women in Physics. With the help of Jerome Wiesner, the president of M.I.T., Kistiakowsky got a generous grant from the Sloan Foundation to finance a comprehensive survey of women physicists. The committee, now funded by the American Physical Society, has formulated the most inclusive program of the society-sponsored caucuses. Published in the June 1972 issue of the *Bulletin of the American Physical Society,* the program has been an example for other groups to follow. The Women Geoscientists Committee was appointed as an official committee of the American Geological Institute in 1973. The institute, which provides funds for a broad scope of activities and publication of a newsletter, expects that new data being assembled now will reveal salary and career advances and greater recognition of women in the geosciences. The Committee on Professional Opportunities of the Institute of Electrical and Electronics Engineers is dedicated to increasing women's participation in engineering. Two other independent groups of women engineers which promote the entry of women into the professions are Women in Science and Engineering, which serves the greater Boston area, and the older Society of Women Engineers, a national organization.

Although the large number of these groups may create an impression of fragmented effort, they in fact insure an effective female "presence" in all scientific organizations. Coordinating the movement, in addition to AWIS, is the Federation of Organizations for Professional Women (FOPW). In only one area would unification of effort be more effective: namely, the compiling of a single comprehensive registry of women scientists.

The overall effect of the women's caucuses has been greater opportunities for women in the professional societies. Significantly, in 1977, the American Chemical Society, the American Institute of Chemists, the New York Academy of Sciences, and the Harvey Society each elected a woman as president for the first time.

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Appendix

Collective Aims and Activities of the Scientific Women's Caucuses[1]

1. To increase professional activities for women in a particular field by
   - *a*) encouraging young women to prepare for a career in science.
   - *b*) encouraging women scientists to apply for research grants and to present papers at meetings.
   - *c*) sponsoring women for election to membership in the professional societies.
   - *d*) providing career guidance, role models, and assistance in moving up.
   - *e*) disseminating job information and helping with preparation of *vitas*.
   - *f*) urging creation of part-time, tenure-track appointments.
   - *g*) urging passage of rules concerning parental (maternity or paternity) leaves.
2. To raise the consciousness of sexism within the professional societies by
   - *a*) emphasizing women's achievements.
   - *b*) pointing out barriers to women's progress.
   - *c*) urging the nomination of women for society officers, editorial boards, and session chairmen at national meetings.
3. To publish newsletters with articles of common professional interest, employment information, research grant deadlines, and a forum for exchange of ideas, problems, and advice on how to cope with the latter.
4. To promote affirmative action by
   - *a*) setting up a mechanism to investigate individual complaints of discrimination.

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[1] A synthesis of information from personal communications from the caucus officers, from newsletters of the Association for Women in Mathematics and Women Geoscientists Committee, and from the June 1972 *Bulletin of the American Physical Society*.

   b) monitoring affirmative action compliance in industrial and academic institutions.
   c) advising appropriate agencies concerning the pool of qualified women for appointment of women to public advisory committees and panels.
   d) joining other women's advocacy groups as *amicus curiae* in legal action to obtain enforcement of antidiscrimination laws.

5. To study the economic and professional status of women by
   a) preparing and maintaining rosters of women by subspecialties.
   b) continual data gathering and monitoring of the evolving status of women.
   c) comparing the job and salary status of women and men of comparable qualifications within the various fields.
6. To promote the formation of a women's network for the foregoing purposes.

Senator **KENNEDY**. We want to thank you all very much for your presence here today. The status of women is an extremely important aspect of health science policy issues. We are going to fashion a health insurance program to deal with a number of these issues. We have other legislative remedies at the same time that we recognize that the Congress can't possibly resolve all of the problems which have been described. But we certainly can deal with many of the inequities which do exist today with good legislation. We're going to look forward to working with all of your groups, and we thank you very much for your extremely helpful and constructive comments on this terribly important issue.

The subcommittee stands in recess.

[Whereupon, at 12:30 p.m., the Subcommittee on Health and Scientific Research was adjourned.]

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